

MARITIME SAFETY COMMITTEE  
93rd session  
Agenda item 22

MSC 93/22/Add.2  
10 June 2014  
Original: ENGLISH

**REPORT OF THE MARITIME SAFETY COMMITTEE  
ON ITS NINETY-THIRD SESSION**

Attached is annex 8 (resolution MSC.372(93) on *Amendments to the International Maritime Dangerous Goods (IMDG) Code*) to the report of the Maritime Safety Committee on its ninety-third session (MSC 93/22).



**ANNEX 8**

**RESOLUTION MSC.372(93)  
(adopted on 22 May 2014)**

**AMENDMENTS TO THE INTERNATIONAL MARITIME  
DANGEROUS GOODS (IMDG) CODE**

THE MARITIME SAFETY COMMITTEE,

RECALLING Article 28(b) of the Convention on the International Maritime Organization concerning the functions of the Committee,

NOTING resolution MSC.122(75) by which it adopted the International Maritime Dangerous Goods Code (hereinafter referred to as "the IMDG Code"), which has become mandatory under chapter VII of the International Convention for the Safety of Life at Sea (SOLAS), 1974, as amended (hereinafter referred to as "the Convention"),

NOTING ALSO article VIII(b) and regulation VII/1.1 of the Convention concerning amendment procedure for amending the IMDG Code,

HAVING CONSIDERED, at its ninety-third session, amendments to the IMDG Code, proposed and circulated in accordance with article VIII(b)(i) of the Convention,

1 ADOPTS, in accordance with article VIII(b)(iv) of the Convention, amendments to the IMDG Code, the text of which is set out in the annex to the present resolution;

2 DETERMINES, in accordance with article VIII(b)(vi)(2)(bb) of the Convention, that the said amendments shall be deemed to have been accepted on 1 July 2015, unless prior to that date, more than one third of the Contracting Governments to the Convention or Contracting Governments the combined merchant fleets of which constitute not less than 50% of the gross tonnage of the world's merchant fleet, have notified their objections to the amendments;

3 INVITES Contracting Governments to the Convention to note that, in accordance with article VIII(b)(vii)(2) of the Convention, the amendments shall enter into force on 1 January 2016 upon their acceptance in accordance with paragraph 2 above;

4 AGREES that Contracting Governments to the Convention may apply the aforementioned amendments in whole or in part on a voluntary basis as from 1 January 2015;

5 REQUESTS the Secretary-General, in conformity with article VIII(b)(v) of the Convention, to transmit certified copies of the present resolution and the text of the amendments contained in the annex to all Contracting Governments to the Convention;

6 ALSO REQUESTS the Secretary-General to transmit copies of this resolution and its annex to Members of the Organization, which are not Contracting Governments to the Convention.

ANNEX

**AMENDMENTS TO THE INTERNATIONAL MARITIME  
DANGEROUS GOODS (IMDG) CODE**

**Table of Contents**

Insert a new section as "7.1.5 Stowage Codes".

Insert a new section as "7.1.6 Handling Codes".

Insert a new section as "7.2.8 Segregation Codes".

**PART 1  
GENERAL PROVISIONS, DEFINITIONS AND TRAINING**

**Chapter 1.1– General provisions**

**1.1.1 Application and implementation of the Code**

1.1.1.9 Insert a new paragraph 1.1.1.9 to read as follows:

**"1.1.1.9 *Lamps containing dangerous goods***

The following lamps are not subject to this Code provided that they do not contain radioactive material and do not contain mercury in quantities above those specified in special provision 366 of chapter 3.3:

- .1 Lamps that are collected directly from individuals and households when transported to a collection or recycling facility;
- .2 Lamps each containing not more than 1 g of dangerous goods and packaged so that there is not more than 30 g of dangerous goods per package, provided that:
  - (i) the lamps are manufactured according to a certified quality management system;

Note: The application of ISO 9001:2008 may be considered acceptable for this purpose.

and

- (ii) each lamp is either individually packed in inner packagings, separated by dividers, or surrounded with cushioning material to protect the lamps and packed into strong outer packagings meeting the general provisions of 4.1.1.1 and capable of passing a 1.2 m drop test.

- .3 Used, damaged or defective lamps each containing not more than 1 g of dangerous goods with not more than 30 g of dangerous goods per package when transported from a collection or recycling facility. The lamps shall be packed in strong outer packagings sufficient for preventing release of the contents under normal conditions of transport meeting the general provisions of 4.1.1.1 and that are capable of passing a drop test of not less than 1.2 m.

Note: lamps containing gases of class 2.2. are addressed in 2.2.2.6.4 and lamps containing radioactive material are addressed in 2.7.2.2.2.2.

- .4 Lamps containing only gases of class 2.2 (according to 2.2.2.2) provided they are packaged so that the projectile effects of any rupture of the bulb will be contained within the package."

## 1.1.2 Conventions

### 1.1.2.3 International Convention for Safe Containers, 1972, as amended

1.1.2.3 Insert a new 1.1.2.3 with the following:

#### "1.1.2.3 International Convention for Safe Containers, 1972, as amended

- 1.1.2.3.1 Regulations 1 and 2 of Annex I to the International Convention for Safe Containers (CSC), 1972, as amended, deal with safety approval plates and maintenance and examination of containers, and are reproduced in full.

**Annex I**  
***Regulations for the testing, inspection, approval  
and maintenance of containers***

**Chapter I**  
***Regulations common to all  
systems of approval***

**Regulation 1**  
***Safety Approval Plate***

- 1 (a) A Safety Approval Plate conforming to the specifications set out in the appendix to this annex shall be permanently affixed to every approved container at a readily visible place, adjacent to any other approval plate issued for official purposes, where it would not be easily damaged.
- (b) On each container, all maximum operating gross mass markings shall be consistent with the maximum operating gross mass information on the Safety Approval Plate.
- (c) The owner of the container shall remove the Safety Approval Plate on the container if:

- (i) the container has been modified in a manner which would void the original approval and the information found on the Safety Approval Plate, or
  - (ii) the container is removed from service and is not being maintained in accordance with the Convention, or
  - (iii) the approval has been withdrawn by the Administration.
- 2 (a) The plate shall contain the following information in at least the English or French language:

**CSC SAFETY APPROVAL**

Country of approval and approval reference

Date (month and year) of manufacture

Manufacturer's identification number of the container or, in the case of existing containers for which that number is unknown, the number allotted by the Administration

Maximum operating gross mass (kg and lb)

Allowable stacking load for 1.8g (kg and lb)

Transverse racking test force (newtons).

- (b) A blank space should be reserved on the plate for insertion of end-wall and/or side-wall strength values (factors) in accordance with paragraph 3 of this regulation and annex II, tests 6 and 7. A blank space should also be reserved on the plate for the first and subsequent maintenance examination dates (month and year) when used.
- 3 Where the Administration considers that a new container satisfies the requirements of the present Convention in respect of safety and if, for such container, the end-wall and/or side-wall strength values (factors) are designed to be greater or less than those stipulated in annex II, such values shall be indicated on the Safety Approval Plate. Where the stacking or racking values are less than 192,000 kg or 150 kN, respectively, the container shall be considered as having limited stacking or racking capacity and shall be conspicuously marked, as required under the relevant standards\*, at or before their next scheduled examination or before any other date approved by the Administration, provided this is not later than 1 July 2015.

- 4 The presence of the Safety Approval Plate does not remove the necessity of displaying such labels or other information as may be required by other regulations which may be in force.
- 5 A container, the construction of which was completed prior to 1 July 2014, may retain the Safety Approval Plate as permitted by the Convention prior to that date as long as no structural modifications occur to that container.

## **Regulation 2**

### *Maintenance and examination*

- 1 The owner of the container shall be responsible for maintaining it in safe condition.
- 2
  - (a) The owner of an approved container shall examine the container or have it examined in accordance with the procedure either prescribed or approved by the Contracting Party concerned, at intervals appropriate to operating conditions.
  - (b) The date (month and year) before which a new container shall undergo its first examination shall be marked on the Safety Approval Plate.
  - (c) The date (month and year) before which the container shall be re-examined shall be clearly marked on the container on or as close as practicable to the Safety Approval Plate and in a manner acceptable to that Contracting Party which prescribed or approved the particular examination procedure involved.
  - (d) The interval from the date of manufacture to the date of the first examination shall not exceed five years. Subsequent examination of new containers and re-examination of existing containers shall be at intervals of not more than 30 months. All examinations shall determine whether the container has any defects which could place any person in danger.
- 3
  - (a) As an alternative to paragraph 2, the Contracting Party concerned may approve a continuous examination programme if satisfied, on evidence submitted by the owner, that such a programme provides a standard of safety not inferior to the one set out in paragraph 2 above.
  - (b) To indicate that the container is operated under an approved continuous examination programme, a mark showing the letters ACEP and the identification of the Contracting Party which has granted approval of the programme shall be displayed on the container on or as close as practicable to the Safety Approval Plate.
  - (c) All examinations performed under such a programme shall determine whether a container has any defects

which could place any person in danger. They shall be performed in connection with a major repair, refurbishment, or on-hire/off-hire interchange and in no case less than once every 30 months.

- 4 As a minimum approved programmes should be reviewed once every 10 years to ensure their continued viability. In order to ensure uniformity by all involved in the inspection of containers and their ongoing operational safety, the Contracting Party concerned shall ensure the following elements are covered in each prescribed periodic or approved continuous examination programme:
- (a) methods, scope and criteria to be used during examinations;
  - (b) frequency of examinations;
  - (c) qualifications of personnel to carry out examinations;
  - (d) system of keeping records and documents that will capture:
    - (i) the owner's unique serial number of the container;
    - (ii) the date on which the examination was carried out;
    - (iii) identification of the competent person who carried out the examination;
    - (iv) the name and location of the organization where the examination was carried out;
    - (v) the results of the examination; and
    - (vi) in the case of a periodic examination scheme (PES), the next examination date (NED);
  - (e) a system for recording and updating the identification numbers of all containers covered by the appropriate examination scheme;
  - (f) methods and systems for maintenance criteria that addresses the design characteristics of the specific containers;
  - (g) provisions for maintaining leased containers if different than those used for owned containers; and
  - (h) conditions and procedures for adding containers into an already approved programme.



- 5 The Contracting Party shall carry out periodic audits of approved programmes to ensure compliance with the provisions approved by the Contracting Party. The Contracting Party shall withdraw any approval when the conditions of approval are no longer complied with.
- 6 For the purpose of this regulation, the Contracting Party concerned is the Contracting Party of the territory in which the owner is domiciled or has his head office. However, in the event that the owner is domiciled or has his head office in a country the government of which has not yet made arrangements for prescribing or approving an examination scheme and until such time as the arrangements have been made, the owner may use the procedure prescribed or approved by the Administration of a Contracting Party which is prepared to act as the Contracting Party concerned. The owner shall comply with the conditions for the use of such procedures set by the Administration in question.
- 7 Administrations shall make information on approved continuous examination programmes publicly available."

## **Chapter 1.2 – Definitions, units of measurement and abbreviations**

### **1.2.1 Definitions**

In all the definitions, whenever the term "for the transport of Class 7 material" is used, replace it with "for the transport of radioactive material".

Amend the following definitions as indicated:

*Design:* in the first sentence, insert "fissile material excepted under 2.7.3.5.6 after "the description of".

*Exclusive use:* replace "and unloading is carried" with "and unloading and shipment are carried" and insert ", where so required by the provisions of this Code;" after "consignee".

*Freight container:* replace the last two sentences with the following:

"In addition: Small freight container means a freight container that has an internal volume of not more than 3 m<sup>3</sup>. Large freight container means a freight container that has an internal volume of more than 3 m<sup>3</sup>."

*GHS:* in the reference for GHS, replace Rev.4 with "Rev.5"

*Manual of Test and Criteria,* add at the end "and Amend.2".

*Multiple-element gas container:* replace "and bundles" with "or bundles".

*Radiation level:* amend the end of the definition to read: "millisieverts per hour or microsieverts per hour;"

Add the following new definitions in alphabetical order:

"*Large salvage packaging* means a special packaging which:

- .1 is designed for mechanical handling; and
- .2 exceeds 400 kg net mass or 450 litres capacity but has a volume of not more than 3 m<sup>3</sup>;

into which damaged, defective or leaking dangerous goods packages, or dangerous goods that have spilled or leaked are placed for purposes of transport for recovery or disposal;"

"*Management system*, for the transport of radioactive material, means a set of interrelated or interacting elements (system) for establishing policies and objectives and enabling the objectives to be achieved in an efficient and effective manner;"

"*Neutron radiation detector* is a device that detects neutron radiation. In such a device, a gas may be contained in a hermetically sealed electron tube transducer that converts neutron radiation into a measureable electric signal;"

"*Radiation detection system* is an apparatus that contains radiation detectors as components;"

## **Chapter 1.5 – General provisions concerning class 7**

Replace the title with "GENERAL PROVISIONS CONCERNING RADIOACTIVE MATERIAL".

### **1.5.1 Scope and application**

1.5.1.1 Amend the second and third sentences to read:

"These provisions are based on the IAEA "Regulations for the Safe Transport of Radioactive material, 2012 Edition, IAEA Safety Standards Series No. SSR-6, IAEA, Vienna (2012)". Explanatory material can be found in "Advisory material for the IAEA Regulations for the Safe Transport of Radioactive Material, IAEA Safety Standards Series No. TS-G-1.1 (Rev.2), IAEA, Vienna (2012)"."

1.5.1.2 In the second sentence of the last paragraph replace "imposing requirements" with "imposing conditions".

1.5.1.4 Amend the first sentence to read: "The provisions of this code do not apply to any of the following:" and insert a new subparagraph .4 to read as follows:

- .4 Radioactive material in or on a person who is to be transported for medical treatment because the person has been subject to accidental or deliberate intake of radioactive material or to contamination;"

and renumber current subparagraphs .4 to .6 accordingly:

and replace new subparagraph .6 (former .5) with the following:

- .6 Natural material and ores containing naturally occurring radionuclides (which may have been processed), provided the activity concentration of the material does not exceed 10 times the values specified in table 2.7.2.2.1, or calculated in accordance with 2.7.2.2.1 and 2.7.2.2.3 to 2.7.2.2.6. For natural materials and ores containing naturally occurring radionuclides that are not in secular equilibrium the calculation of the activity concentration shall be performed in accordance with 2.7.2.2.4;"

### **1.5.1.5 Specific provisions for the transport of excepted packages**

1.5.1.5.1 Amend to read as follows:

"1.5.1.5.1 Excepted packages which may contain radioactive material in limited quantities, instruments, manufactured articles or empty packagings as specified in 2.7.2.4.1 shall be subject only to the following provisions of parts 5 to 7:

- .1 The applicable provisions specified in 5.1.1.2, 5.1.2, 5.1.3.2, 5.1.5.2.2, 5.1.5.4, 5.2.1.7, 7.1.4.5.9, 7.1.4.5.10, 7.1.4.5.12, 7.8.4.1 to 7.8.4.6 and 7.8.9.1; and
- .2 The requirements for excepted packages specified in 6.4.4,

except when the radioactive material possesses other hazardous properties and has to be classified in a class other than Class 7 in accordance with special provision 290 or 369 of Chapter 3.3, where the provisions listed in .1 and .2 above apply only as relevant and in addition to those relating to the main class or division."

1.5.1.5.2 Insert a new second sentence to read as follows:

"If the excepted package contains fissile material, one of the fissile exceptions provided by 2.7.2.3.5 shall apply and the requirements of 5.1.5.5 shall be met."

### **1.5.2 Radiation protection programme**

1.5.2.4 Amend the end of the introductory sentence to read "that the effective dose either:" and insert "or" at the end of subparagraph .1.

### **1.5.3 Quality assurance**

1.5.3 Amend to read as follows:

"1.5.3 Management system

1.5.3.1 A management system based on international, national or other standards acceptable to the competent authority shall be established and implemented for all activities within the scope of this Code, as identified in 1.5.1.3, to ensure compliance with the relevant provisions of this Code. Certification that the design specification has been fully implemented shall be available to the competent authority. The manufacturer, consignor or user shall be prepared:

- .1 to provide facilities for inspection during manufacture and use; and
- .2 to demonstrate compliance with this Code to the competent authority.

Where competent authority approval is required, such approval shall take into account and be contingent upon the adequacy of the management system."

### **1.5.4 Special arrangement**

1.5.4.2 Replace "Class 7" with "radioactive material", twice.

## **1.5.6 Non-compliance**

1.5.6.1 In the introductory sentence, delete "a" before "non-compliance". In .1 amend the introductory sentence to read:

"The consignor, consignee, carrier and any organization involved during transport who may be affected, as appropriate, shall be informed of the non-compliance:"

and in .2(iv), delete "and" at the end of the sentence.

## **PART 2 CLASSIFICATION**

### **Chapter 2.0 – Introduction**

#### **2.0.1 Classes, divisions, packing groups**

##### **2.0.1.2 Marine pollutants**

2.0.1.2.1 Amend paragraph 2.0.1.2.1 to read as follows:

"Many of the substances assigned to classes 1 to 6.2, 8 and 9 are deemed as being *marine pollutants* (see chapter 2.10)."

2.0.1.3 Add the following new paragraph at the end:

"Articles are not assigned to packing groups. For packing purposes any requirement for a specific packaging performance level is set out in the applicable packing instruction."

#### **2.0.3 Classification of substances, mixtures and solutions with multiple hazards (precedence of hazard characteristics)**

2.0.3.5 Amend the last sentence to read as follows:

"For radioactive material in excepted packages, except for UN 3507, URANIUM HEXAFLUORIDE, RADIOACTIVE MATERIAL, EXCEPTED PACKAGE, special provision 290 of Chapter 3.3 applies."

### **Chapter 2.1 – Class 1 – Explosives**

#### **2.1.0 Introductory notes (these notes are not mandatory)**

Amend Note 2 in 2.1.3.5.5 to read as follows:

**Note 2:** "Flash composition" in this table refers to pyrotechnic substances in powder form or as pyrotechnic units as presented in the firework that are used to produce an aural effect or used as a bursting charge, or propellant charge unless the time taken for the pressure rise is demonstrated to be more than 6 ms for 0.5 g of pyrotechnic substance in the HSL Flash Composition Test in appendix 7 of the Manual of Tests and Criteria."

## Chapter 2. 2 – Class 2 – Gases

### 2.2.1 Definitions and general provisions

2.2.1.2 Add a new indent .5 to read as follows:

".5 *Adsorbed gas* – a gas which when packaged for transport is adsorbed onto a solid porous material resulting in an internal receptacle pressure of less than 101.3 kPa at 20°C and less than 300 kPa at 50°C."

### 2.2.2 Class subdivisions

2.2.2.6 Delete subparagraph ".4" and add the following note at the end:

"Note: This exemption does not apply to lamps. For lamps see 1.1.1.9".

## Chapter 2.3 – Class 3 – Flammable liquids

### 2.3.2 Assignment of packing group

2.3.2.2 and 2.3.2.3 Replace existing paragraphs with the following:

"2.3.2.2 Viscous flammable liquids such as paints, enamels, lacquers, varnishes, adhesives and polishes having a flash point of less than 23°C may be placed in packing group III in conformity with the procedures prescribed in the Manual of Tests and Criteria, Part III, sub-section 32.3, provided that:

.1 The viscosity expressed as the flowtime in seconds and flash point are in accordance with the following table:

<i>Flow-time t in seconds</i>	<i>Jet diameter (mm)</i>	<i>Flash point, closed-cup (°C)</i>
20 < t ≤ 60	4	above 17
60 < t ≤ 100	4	above 10
20 < t ≤ 32	6	above 5
32 < t ≤ 44	6	above -1
44 < t ≤ 100	6	above -5
100 < t	6	no limit

.2 Less than 3% of the clear solvent layer separates in the solvent separation test;

.3 The mixture or any separated solvent does not meet the criteria for Class 6.1 or Class 8;

.4 The substances are packed in receptacles of not more than 30-litre capacity.

2.3.2.3 *Reserved.*"

2.3.2.5 At the beginning, replace "Viscous substances" with "Viscous liquids". Amend the fourth indent to read as follows:

"- are packed in receptacles of not more than 30-litre capacity".

## **Chapter 2.4 – Class 4 – Flammable solids; substances liable to spontaneous combustion; substances which, in contact with water, emit flammable gases**

### **2.4.4 Class 4.3 – Substances which, in contact with water, emit flammable gases**

#### **2.4.4.1 Definitions and properties**

2.4.4.1.2 Replace "light bulbs" with "lamps"

## **Chapter 2.5 – Class 5 – Oxidizing substances and organic peroxides**

### **2.5.1 Definitions and general provisions**

### **2.5.2 Class 5.1 – Oxidizing substances**

#### **2.5.2.2 Oxidizing solids**

##### *2.5.2.2.1 Classification of solid substances of class 5.1*

2.5.2.2.1.1 Amend to read as follows:

"2.5.2.2.1.1 Tests are performed to measure the potential for the solid substance to increase the burning rate or burning intensity of a combustible substance when the two are thoroughly mixed. The procedure is given in the Manual of Tests and Criteria, part III, sub-section 34.4.1 (test O.1) or alternatively, in sub-section 34.4.3 (test O.3). Tests are conducted on the substance to be evaluated mixed with dry fibrous cellulose in mixing ratios of 1:1 and 4:1, by mass, of sample to cellulose. The burning characteristics of the mixtures are compared:

- .1 in the test O.1, with the standard 3:7 mixture, by mass, of potassium bromate to cellulose. If the burning time is equal to or less than this standard mixture, the burning times shall be compared with those from the packing group I or II reference standards, 3:2 and 2:3 ratios, by mass, of potassium bromate to cellulose respectively; or
- .2 in the test O.3, with the standard 1:2 mixture, by mass, of calcium peroxide to cellulose. If the burning rate is equal to or greater than this standard mixture, the burning rates shall be compared with those from the packing group I or II reference standards 3:1 and 1:1 ratios, by mass, of calcium peroxide to cellulose, respectively."

2.5.2.2.1.2 Amend to read as follows:

"2.5.2.2.1.2 The classification test results are assessed on the basis of:

- .1 the comparison of the mean burning time (for the test O.1) or burning rate (for the test O.3) with those of the reference mixtures; and

- .2 whether the mixture of substance and cellulose ignites and burns."

2.5.2.2.1.3 Amend to read as follows:

"2.5.2.2.1.3 A solid substance is classified in Class 5.1 if the 4:1 or 1:1 sample-to-cellulose ratio (by mass) tested, exhibits:

- .1 in the test O.1, a mean burning time equal to or less than the mean burning time of a 3:7 mixture (by mass) of potassium bromate and cellulose ; or
- .2 in the test O.3, a mean burning rate equal to or greater than the mean burning rate of a 1:2 mixture (by mass) of calcium peroxide and cellulose."

2.5.2.2.2 *Assignment of packing groups*

2.5.2.2.2 Amend to read as follows:

"2.5.2.2.2 Assignment of packing groups

Solid oxidizing substances are assigned to a packing group according to one of the test procedures in the Manual of Tests and Criteria, Part III, sub-section 34.4.1 (test O.1) or sub-section 34.4.3 (test O.3), in accordance with the following criteria:

- .1 Test O.1:
  - (i) Packing group I: any substance which, in the 4:1 or 1:1 sample-to-cellulose ratio (by mass) tested, exhibits a mean burning time less than the mean burning time of a 3:2 mixture, by mass, of potassium bromate and cellulose;
  - (ii) Packing group II: any substance which, in the 4:1 or 1:1 sample-to-cellulose ratio (by mass) tested, exhibits a mean burning time equal to or less than the mean burning time of a 2:3 mixture (by mass) of potassium bromate and cellulose, and the criteria for packing group I are not met;
  - (iii) Packing group III: any substance which, in the 4:1 or 1:1 sample-to-cellulose ratio (by mass) tested, exhibits a mean burning time equal to or less than the mean burning time of a 3:7 mixture (by mass) of potassium bromate and cellulose , and the criteria for packing groups I and II are not met;
  - (iv) Not Class 5.1: any substance which, in both the 4:1 and 1:1 sample-to-cellulose ratio (by mass) tested, does not ignite and burn, or exhibits mean burning times greater than that of a 3:7 mixture (by mass) of potassium bromate and cellulose.

- .2 Test O.3:
- (i) Packing group I: any substance which, in the 4:1 or 1:1 sample-to-cellulose ratio (by mass) tested, exhibits a mean burning rate greater than the mean burning rate of a 3:1 mixture (by mass) of calcium peroxide and cellulose;
  - (ii) Packing group II: any substance which, in the 4:1 or 1:1 sample-to-cellulose ratio (by mass) tested, exhibits a mean burning rate equal to or greater than the mean burning rate of a 1:1 mixture (by mass) of calcium peroxide and cellulose, and the criteria for packing group I are not met;
  - (iii) Packing group III: any substance which, in the 4:1 or 1:1 sample-to-cellulose ratio (by mass) tested, exhibits a mean burning rate equal to or greater than the mean burning rate of a 1:2 mixture (by mass) of calcium peroxide and cellulose, and the criteria for packing groups I and II are not met;
  - (iv) Not Class 5.1: any substance which, in both the 4:1 and 1:1 sample-to-cellulose ratio (by mass) tested, does not ignite and burn, or exhibits a mean burning rate less than the mean burning rate of a 1:2 mixture (by mass) of calcium peroxide and cellulose."

2.5.2.3.1.1 At the end of the second sentence after "3.4.4.2" insert "(test O.2)".

## **Chapter 2.6 – Class 6 – Toxic and infectious substances**

### **2.6.3 Class 6.2 – Infectious substances**

#### *2.6.3.2.3 Exemptions*

2.6.3.2.3.5 Amend to read as follows:

"2.6.3.2.3.5 Dried blood spots, collected by applying a drop of blood onto absorbent material, are not subject to the provisions of this Code."

and insert two new paragraphs 2.6.3.2.3.6 and 2.6.3.2.3.7 to read as follows and renumber existing paragraphs accordingly:

"2.6.3.2.3.6 Faecal occult blood screening samples are not subject to the provisions of this Code.

2.6.3.2.3.7 Blood or blood components which have been collected for the purposes of transfusion or for the preparation of blood products to be used for transfusion or transplantation and any tissues or organs intended for use in transplantation as well as samples drawn in connection with such purposes are not subject to the provisions of this Code."



## Chapter 2.7 – Class 7 – Radioactive material

### 2.7.1.3 Definitions of specific terms

2.7.1.3 Amend the definitions hereafter as follows:

*Fissile nuclides:* Amend the end of the introductory text before subparagraph .1 to read: "of fissile material are the following:".

In subparagraph .1, delete "and".

Insert the following new subparagraphs and text:

.3 material with fissile nuclides less than a total of 0.25 g;

.4 any combination of .1, .2 and/or .3.

These exclusions are only valid if there is no other material with fissile nuclides in the package or in the consignment if shipped unpackaged."

*Surface contaminated object:* at the end, replace "surfaces" with "surface".

## 2.7.2 Classification

### 2.7.2.1 General provisions

2.7.2.1.1 Amend to read as follows:

"Radioactive material shall be assigned to one of the UN numbers specified in table 2.7.2.1.1, in accordance with 2.7.2.4.2 to 2.7.2.5, taking into account the material characteristics determined in 2.7.2.3."

**Table 2.7.2.1.1 – Assignment of UN Numbers**

2.7.2.1.1 Amend the table as follows:

Table 2.7.2.1.1 Add a new heading row to read:

UN Nos.	Proper shipping name and description
---------	--------------------------------------

For UN Nos. 2912, 3321, 3322, 2913, 2915, 3332, 2916, 2917, 3323, 2919 and 2978, insert a reference to a new note "b" after "fissile-excepted".

Under the headings "Excepted packages" and "Uranium hexafluoride" add the following new entry:

"UN 3507 URANIUM HEXAFLUORIDE, RADIOACTIVE MATERIAL, EXCEPTED PACKAGE less than 0.1 kg per package, non-fissile or fissile-excepted<sup>b,c"</sup>

Add the following table notes "a", "b" and "c" after the table:

<sup>a</sup> *The proper shipping name is found in the column "proper shipping name and description" and is restricted to that part shown in capital letters. In the*

*cases of UN Nos. 2909, 2911, 2913 and 3326, where alternative proper shipping names are separated by the word "or" only the relevant proper shipping name shall be used.*

*b The term "fissile-excepted" refers only to material excepted under 2.7.2.3.5.*

*c For UN No. 3507, see also special provision 369 in Chapter 3.3."*

## **2.7.2.2 Determination of activity level**

2.7.2.2.1 In .2, insert "limits" after "concentration".

Table 2.7.2.2.1 In the heading of column 4 insert "limit" after "concentration". In (a) after the table, in the introductory sentence, replace "from daughter radionuclides" with "from their progeny".

2.7.2.2.2 Amend the text before the table to read as follows:

"2.7.2.2.2 For individual radionuclides:

- .1 Which are not listed in table 2.7.2.2.1 the determination of the basic radionuclide values referred to in 2.7.2.2.1 shall require multilateral approval. For these radionuclides, activity concentration limits for exempt material and activity limits for exempt consignments shall be calculated in accordance with the principles established in the International Basic Safety Standards for Protection against Ionizing Radiation and for the Safety of Radiation Sources, Safety Series No.115, IAEA, Vienna (1996). It is permissible to use an  $A_2$  value calculated using a dose coefficient for the appropriate lung absorption type as recommended by the International Commission on Radiological Protection, if the chemical forms of each radionuclide under both normal and accident conditions of transport are taken into consideration. Alternatively, the radionuclide values in table 2.7.2.2.2 may be used without obtaining competent authority approval;
- .2 In instruments or articles in which the radioactive material is enclosed or is included as a component part of the instrument or other manufactured article and which meet 2.7.2.4.1.3.3, alternative basic radionuclide values to those in table 2.7.2.2.1 for the activity limit for an exempt consignment are permitted and shall require multilateral approval. Such alternative activity limits for an exempt consignment shall be calculated in accordance with the principles set out in the International Basic Safety Standards for Protection against Ionizing Radiation and for the Safety of Radiation Sources, Safety Series No.115, IAEA, Vienna (1996)."

### **Table 2.7.2.2.2 – Basic radionuclide values for unknown radionuclides or mixtures**

In the table for 2.7.2.2.2, in the heading of the fourth column, insert "limit" after "concentration".

2.7.2.2.4 In the introductory sentence delete "the determination of" and in the legend for X(i) and X<sub>m</sub> replace "concentration" with "concentration limit".

### **2.7.2.3 Determination of other material characteristics**

#### *2.7.2.3.1 Low specific activity (LSA) material*

2.7.2.3.1.2.1 In subparagraph "(i)", delete "which are intended to be processed for the use of these radionuclides".

2.7.2.3.1.2.1 Subparagraph "(iii)" to read:

"(iii) radioactive material for which the A2 value is unlimited. Fissile material may be included only if excepted under 2.7.2.3.5;"

2.7.2.3.1.2.1 (iv), replace ", excluding fissile material not excepted under 2.7.2.3.5" with ". Fissile material may be included only if excepted under 2.7.2.3.5".

2.7.2.3.1.2.2 In subparagraph "(i)", delete "or".

2.7.2.3.1.2.3 In the introductory sentence, replace "meeting the requirements" with "that meet the requirements".

2.7.2.3.1.2.3 In subparagraph "(i)" replace "bitumen, ceramic, etc." with "bitumen and ceramic".

#### *2.7.2.3.2 Surface contaminated object (SCO)*

2.7.2.3.2.1 At the end of subparagraph "(ii)", replace "and" with "or".

2.7.2.3.2.2 At the end of subparagraph "(ii)", replace "and" with "or".

#### *2.7.2.3.3 Special form radioactive material*

2.7.2.3.3.6.1 Amend subparagraph ".1" to read as follows:

".1 The tests prescribed in 2.7.2.3.3.5.1 and 2.7.2.3.3.5.2 provided that the specimens are alternatively subjected to the impact test prescribed in ISO 2919:2012: "Radiation Protection – Sealed Radioactive Sources – General requirements and classification":

(i) The Class 4 impact test if the mass of the special form radioactive material is less than 200 g; and

(ii) The Class 5 impact test if the mass of the special form radioactive material is equal to or more than 200 g but less than 500 g;"

2.7.2.3.3.6.2 Replace the reference "ISO 2919:1999" with "ISO 2919:2012".

2.7.2.3.3.8.2 Replace "which are acceptable" with "provided that they are acceptable".

### 2.7.2.3 Determination of other material characteristics

#### 2.7.2.3.5 Fissile material

2.7.2.3.5 Amend the first paragraph to read as follows:

"Fissile material and packages containing fissile material shall be classified under the relevant entry as "FISSILE" in accordance with table 2.7.2.1.1 unless excepted by one of the provisions of subparagraphs .1 to .6 below and transported subject to the requirements of 5.1.5.5. All provisions apply only to material in packages that meets the requirements of 6.4.7.2 unless unpackaged material is specifically allowed in the provision."

#### 2.7.2.3.5 *Fissile material*

2.7.2.3.5 Delete current subparagraphs ".1" and ".4". Current ".2" and ".3" are renumbered as ".1" and ".2" respectively.

2.7.2.3.5 Insert the following new subparagraphs ".3 to .6":

- .3 Uranium with a maximum uranium enrichment of 5% by mass uranium-235 provided:
  - (i) there is no more than 3.5 g of uranium-235 per package;
  - (ii) the total plutonium and uranium-233 content does not exceed 1% of the mass of uranium-235 per package;
  - (iii) Transport of the package is subject to the consignment limit provided in 5.1.5.5.3;
- .4 Fissile nuclides with a total mass not greater than 2.0 g per package provided the package is transported subject to the consignment limit provided in 5.1.5.5.4;
- .5 Fissile nuclides with a total mass not greater than 45 g either packaged or unpackaged subject to limits provided in 5.1.5.5.5; and
- .6 A fissile material that meets the requirements of 5.1.5.5.2, 2.7.2.3.6 and 5.1.5.2.1."

#### **Table 2.7.2.3.5 – Consignment mass limits for exceptions from the requirements for packages containing fissile material**

Table 2.7.2.3.5 is deleted.

Insert a new paragraph 2.7.2.3.6 to read as follows:

"2.7.2.3.6 A fissile material excepted from classification as "FISSILE" under 2.7.2.3.5.6 shall be subcritical without the need for accumulation control under the following conditions:

- .1 The conditions of 6.4.11.1 (a);

- .2 The conditions consistent with the assessment provisions stated in 6.4.11.12 (b) and 6.4.11.13 (b) for packages; and
- .3 The conditions specified in 6.4.11.11 (a), if transported by air."

#### **2.7.2.4 Classification of packages or unpacked material**

##### *2.7.2.4.1 Classification as excepted package*

###### 2.7.2.4.1.1 Amend to read as follows:

"2.7.2.4.1.1 A package may be classified as an excepted package if it meets one of the following conditions:

- .1 It is an empty package having contained radioactive material;
- .2 It contains instruments or articles not exceeding the activity limits specified in columns (2) and (3) of table 2.7.2.4.1.2;
- .3 It contains articles manufactured of natural uranium, depleted uranium or natural thorium;
- .4 It contains radioactive material not exceeding the activity limits specified in column (4) of table 2.7.2.4.1.2; or
- .5 It contains less than 0.1 kg of uranium hexafluoride not exceeding the activity limits specified in column (4) of table 2.7.2.4.1.2."

2.7.2.4.1.3 In the introductory sentence replace "only if" with "provided that".

2.7.2.4.1.3.2 Replace "except" with "on its external surface except for the following:"

and amend (ii) to read as follows:

- "(ii) consumer products that either have received regulatory approval in accordance with 1.5.1.4.5 or do not individually exceed the activity limit for an exempt consignment in table 2.7.2.2.1 (column 5), provided such products are transported in a package that bears the marking "RADIOACTIVE" on its internal surface in such a manner that a warning of the presence of radioactive material is visible on opening the package; "

and insert a new subparagraph "(iii)" under ".2" to read as follows:

- "(iii) Other instruments or articles too small to bear the marking "RADIOACTIVE", provided that they are transported in a package that bears the marking "RADIOACTIVE" on its internal surface in such a manner that a warning of the presence of radioactive material is visible on opening the package; and"

2.7.2.4.1.4.2 Amend to read as follows:

- ".2 The package bears the marking "RADIOACTIVE" on either:

- (i) An internal surface in such a manner that a warning of the presence of radioactive material is visible on opening the package; or
- (ii) The outside of the package, where it is impractical to mark an internal surface."

Insert a new 2.7.2.4.1.5 to read as follows:

"2.7.2.4.1.5 Uranium hexafluoride not exceeding the limits specified in column 4 of table 2.7.2.4.1.2 may be classified under UN 3507 URANIUM HEXAFLUORIDE, RADIOACTIVE MATERIAL, EXCEPTED PACKAGE, less than 0.1 kg per package, non-fissile or fissile-excepted provided that:

- .1 The mass of uranium hexafluoride in the package is less than 0.1 kg; and
- .2 The conditions of 2.7.2.4.5.1 and 2.7.2.4.1.4.1 and 2.7.2.4.1.4.2 are met."

and existing paragraph 2.7.2.4.1.5 is renumbered as "2.7.2.4.1.7".

2.7.2.4.1.6 Replace "only if" with "provided that".

2.7.2.4.1.7 (former 2.7.2.4.1.5) In the introductory sentence replace "only if" with "provided that".

#### 2.7.2.4.4 *Classification as Type A package*

2.7.2.4.4 In the sentence before the subparagraphs, replace "activities greater than the following:" with "activities greater than either of the following:".

2.7.2.4.4.1 Delete "or".

2.7.2.4.4 In the legend for the formula where "C(j)", delete "and".

#### 2.7.2.4.5 *Classification of uranium hexafluoride*

2.7.2.4.5 Amend to read as follows:

"2.7.2.4.5 *Classification of uranium hexafluoride*

2.7.2.4.5.1 Uranium hexafluoride shall only be assigned to:

- .1 UN No.2977, RADIOACTIVE MATERIAL, URANIUM HEXAFLUORIDE, FISSILE;
- .2 UN No.2978, RADIOACTIVE MATERIAL, URANIUM HEXAFLUORIDE, non-fissile or fissile-excepted; or
- .3 UN No.3507, URANIUM HEXAFLUORIDE, RADIOACTIVE MATERIAL, EXCEPTED PACKAGE less than 0.1 kg per package, non-fissile or fissile-excepted.

2.7.2.4.5.2 The contents of a package containing uranium hexafluoride shall comply with the following requirements:

- .1 For UN Nos. 2977 and 2978, the mass of uranium hexafluoride shall not be different from that allowed for the package design, and for UN 3507, the mass of uranium hexafluoride shall be less than 0.1 kg;
- .2 The mass of uranium hexafluoride shall not be greater than a value that would lead to an ullage smaller than 5% at the maximum temperature of the package as specified for the plant systems where the package shall be used; and
- .3 The uranium hexafluoride shall be in solid form and the internal pressure shall not be above atmospheric pressure when presented for transport."

2.7.2.4.6 *Classification as Type B(U), Type B(M) or Type C packages*

2.7.2.4.6.1 Replace "competent authority approval certificate" with "competent authority certificate of approval".

2.7.2.4.6.2 Amend to read:

"2.7.2.4.6.2 The contents of a Type B(U), Type B(M) or Type C package shall be as specified in the certificate of approval".

2.7.2.4.6.3 is deleted.

2.7.2.4.6.4 is deleted.

## **Chapter 2.9 – Miscellaneous dangerous substances and articles (class 9) and environmentally hazardous substances**

Amend "Note 2" to read as follows:

"Although the environmentally hazardous substances (aquatic environment) criteria apply to all hazard classes, except for class 7 (see paragraphs 2.10.2.3, 2.10.2.5 and 2.10.3.2), the criteria have been included in this chapter."

### **2.9.2 Assignment to class 9**

2.9.2.2 Under "Substances which, on inhalation as fine dust, may endanger health", replace all three entries by:

"2212 ASBESTOS, AMPHIBOLE (amosite, tremolite, actinolite, anthophyllite, crocidolite)

2590 ASBESTOS, CHRYSOTILE".

replace the existing heading "Electric double layer capacitors" with "Capacitors",

and replace the existing entry under this heading with the following two entries:

"3499 CAPACITOR, ELECTRIC DOUBLE LAYER (with an energy storage capacity greater than 0.3Wh)

3508 CAPACITOR, ASYMMETRIC (with an energy storage capacity greater than 0.3Wh)."

Under "Life-saving appliances", replace the three entries for UN No.3268 by:

"3268 SAFETY DEVICES, electrically initiated".

For "Other substances or articles presenting a danger during transport, but not meeting the definitions of another class", add the following new entry with the corresponding footnote:

"3509 PACKAGING DISCARDED, EMPTY, UNCLEANED\*\*"

Footnote: "\*\*\* This entry shall not be used for sea transport. Discarded packaging shall meet the requirements of 4.1.1.11."

## 2.9.4 Lithium batteries

2.9.4.1 Replace the second sentence with the following:

"Cells and batteries manufactured according to a type meeting the requirements of subsection 38.3 of the Manual of Tests and Criteria, Revision 3, Amendment 1 or any subsequent revision and amendment applicable at the date of the type testing may continue to be transported, unless otherwise provided in this Code.

Cell and battery types only meeting the requirements of the Manual of Tests and Criteria, Revision 3, are no longer valid. However, cells and batteries manufactured in conformity with such types before 1 July 2003 may continue to be transported if all other applicable requirements are fulfilled."

and amend the note to read as follows:

**Note:** Batteries shall be of a type proved to meet the testing requirements of the *Manual of Tests and Criteria*, part III, sub-section 38.3, irrespective of whether the cells of which they are composed are of a tested type."

## Chapter 2.10 – Marine Pollutants

### 2.10.2 General provisions

2.10.2.4 Amend to read as follows:

"2.10.2.4 Column 4 of the Dangerous Goods List also provides information on marine pollutants using the symbol **P** for single entries. The absence of the symbol P or the presence of a "-" in that column does not preclude the application of 2.10.3."

2.10.2.7 Add a new paragraph 2.10.2.7 as follows:

"2.10.2.7 *Marine pollutants packaged in single or combination packagings containing a net quantity per single or inner packaging of 5 l or less for*



*liquids or having a net mass per single or inner packaging of 5 kg or less for solids are not subject to any other provisions of this Code relevant to marine pollutants provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8. In the case of marine pollutants also meeting the criteria for inclusion in another hazard class all provisions of this Code relevant to any additional hazards continue to apply."*

### **2.10.3 Classification**

2.10.3.2 Add a new paragraph "2.10.3.2" to read as follows:

"2.10.3.2 The classification criteria of 2.9.3 are not applicable to substances or materials of class 7."

## **PART 3**

### **DANGEROUS GOODS LIST, SPECIAL PROVISIONS AND EXEMPTIONS**

#### **3.1 General**

##### **3.1.2 Proper shipping names**

###### **3.1.2.9 Marine pollutants**

3.1.2.9.1 Replace the existing paragraph 3.1.2.9.1 to read as follows:

"3.1.2.9.1 For the purpose of documentation, the Proper Shipping Name of generic or "not otherwise specified" (N.O.S.) entries which are classified as marine pollutants in accordance with 2.10.3, shall be supplemented with the recognized chemical name of the constituent which most predominantly contributes to the classification as marine pollutant."

##### **3.1.4 Segregation groups**

3.1.4.1 In the paragraph, replace the words "column 16" with "column 16b".

### **Chapter 3.2 – Dangerous Goods List**

#### **3.2.1 Structure of the dangerous goods list**

3.2.1 The following sentence is added at the end of column 4: "The absence of the symbol **P** or the presence of a "-" in that column does not preclude the application of 2.10.3."

3.2.1 The text for column 16 "column 16 Stowage and segregation – this column contains the stowage and segregation provisions as prescribed in part 7." is replaced with the following:

"Column 16a Stowage and handling – this column contains the stowage and handling codes as specified in 7.1.5 and 7.1.6.

Column 16 b Segregation – this column contains the segregation codes as specified in 7.2.8."

### **Dangerous Goods List**

Replace the existing "column 16" with column "16a Stowage and handling" and "column "16b Segregation" as follows:

**REORGANIZATION OF COLUMN 16 IN THE DANGEROUS GOODS LIST  
OF THE IMDG CODE**

UN Number	PROPER SHIPPING NAME (Note: When there is more than one packing group or PSN the UN No. has been annotated with a, b, c)	Class or division	Subsidiary risk(s)	Packing Group	Stowage and Handling	Segregation
1	2	3	4	5	(16a)	(16b)
	3.1.2	"2.0	"2.0	2.0.1.3	7.1, 7.3-7.7	7.2-7.7
0004	AMMONIUM PICRATE dry or wetted with less than 10% water, by mass	1.1D			Category 04 SW1	SG27 SG31
0005	CARTRIDGES FOR WEAPONS with bursting charge	1.1F			Category 05 SW1	
0006	CARTRIDGES FOR WEAPONS with bursting charge	1.1E			Category 04 SW1	
0007	CARTRIDGES FOR WEAPONS with bursting charge	1.2F			Category 05 SW1	
0009	AMMUNITION, INCENDIARY with or without burster, expelling charge or propelling charge	1.2G			Category 03 SW1	
0010	AMMUNITION, INCENDIARY with or without burster, expelling charge or propelling charge	1.3G			Category 03 SW1	
0012	CARTRIDGES FOR WEAPONS, INERT PROJECTILE or CARTRIDGES, SMALL ARMS	1.4S			Category 01 SW1	
0014	CARTRIDGES FOR WEAPONS, BLANK or CARTRIDGES, SMALL ARMS, BLANK	1.4S			Category 01 SW1	
0015	AMMUNITION, SMOKE with or without burster, expelling charge or propelling charge	1.2G			Category 03 SW1	
0016	AMMUNITION, SMOKE with or without burster, expelling charge or propelling charge	1.3G			Category 03 SW1	
0018	AMMUNITION, TEAR-PRODUCING with burster, expelling charge or propelling charge	1.2G			Category 03 SW1	SG2
0019	AMMUNITION, TEAR-PRODUCING with burster, expelling charge or propelling charge	1.3G			Category 03 SW1	SG3
0020	AMMUNITION, TOXIC with burster, expelling charge or propelling charge	1.2K			Category 05 SW1	
0021	AMMUNITION, TOXIC with burster, expelling charge or propelling charge	1.3K			Category 05 SW1	
0027	BLACK POWDER (GUNPOWDER) granular, or as a meal	1.1D			Category 04 SW1	
0028	BLACK POWDER (GUNPOWDER), COMPRESSED or BLACK POWDER (GUNPOWDER) IN PELLETS	1.1D			Category 04 SW1	
0029	DETONATORS, NON-ELECTRIC for blasting	1.1B			Category 05 SW1	
0030	DETONATORS, ELECTRIC for blasting	1.1B			Category 05 SW1	
0033	BOMBS with bursting charge	1.1F			Category 05 SW1	
0034	BOMBS with bursting charge	1.1D			Category 04 SW1	
0035	BOMBS with bursting charge	1.2D			Category 04 SW1	
0037	BOMBS, PHOTO-FLASH	1.1F			Category 05 SW1	
0038	BOMBS, PHOTO-FLASH	1.1D			Category 04 SW1	

UN Number	PROPER SHIPPING NAME (Note: When there is more than one packing group or PSN the UN No. has been annotated with a, b, c)	Class or division	Subsidiary risk(s)	Packing Group	Stowage and Handling	Segregation
0039	BOMBS, PHOTO-FLASH	1.2G			Category 03 SW1	
0042	BOOSTERS without detonator	1.1D			Category 04 SW1	
0043	BURSTERS explosive	1.1D			Category 04 SW1	
0044	PRIMERS, CAP TYPE	1.4S			Category 01 SW1	
0048	CHARGES, DEMOLITION	1.1D			Category 04 SW1	
0049	CARTRIDGES, FLASH	1.1G			Category 03 SW1	
0050	CARTRIDGES, FLASH	1.3G			Category 03 SW1	
0054	CARTRIDGES, SIGNAL	1.3G			Category 03 SW1	
0055	CASES, CARTRIDGE, EMPTY, WITH PRIMER	1.4S			Category 01 SW1	
0056	CHARGES, DEPTH	1.1D			Category 04 SW1	
0059	CHARGES, SHAPED without detonator	1.1D			Category 04 SW1	
0060	CHARGES, SUPPLEMENTARY, EXPLOSIVE	1.1D			Category 04 SW1	
0065	CORD, DETONATING flexible	1.1D			Category 04 SW1	
0066	CORD, IGNITER	1.4G			Category 02 SW1	
0070	CUTTERS, CABLE, EXPLOSIVE	1.4S			Category 01 SW1	
0072	CYCLOTRIMETHYLENETRINITRAMINE, (CYCLONITE), (RDX), (HEXOGEN), WETTED with not less than 15% water, by mass	1.1D			Category 04 SW1	
0073	DETONATORS FOR AMMUNITION	1.1B			Category 05 SW1	
0074	DIAZODINITROPHENOL, WETTED with not less than 40% water or mixture of alcohol and water, by mass	1.1A			Category 05 SW1	
0075	DIETHYLENEGLYCOL DINITRATE, DESENSITIZED with not less than 25% non-volatile water-insoluble phlegmatizer, by mass	1.1D			Category 04 SW1	
0076	DINITROPHENOL dry or wetted with less than 15% water, by mass	1.1D			Category 04 SW1	SG31
0077	DINITROPHENOLATES alkali metals, dry or wetted with less than 15% water, by mass	1.3C			Category 04 SW1	SG31
0078	DINITRORESORCINOL dry or wetted with less than 15% water, by mass	1.1D			Category 04 SW1	SG31
0079	HEXANITRODIPHENYLAMINE (DIPICRYLAMINE), (HEXYL)	1.1D			Category 04 SW1	
0081	EXPLOSIVE, BLASTING, TYPE A	1.1D			Category 04 SW1	SG34
0082	EXPLOSIVE, BLASTING, TYPE B	1.1D			Category 04 SW1	SG34
0083	EXPLOSIVE, BLASTING, TYPE C	1.1D			Category 04 SW1	SG28
0084	EXPLOSIVE, BLASTING, TYPE D	1.1D			Category 04 SW1	

UN Number	PROPER SHIPPING NAME (Note: When there is more than one packing group or PSN the UN No. has been annotated with a, b, c)	Class or division	Subsidiary risk(s)	Packing Group	Stowage and Handling	Segregation
0092	FLARES, SURFACE	1.3G			Category 03 SW1	
0093	FLARES, AERIAL	1.3G			Category 03 SW1	
0094	FLASH POWDER	1.1G			Category 03 SW1	
0099	FRACTURING DEVICES,EXPLOSIVE for oil wells, without detonator	1.1D			Category 04 SW1	
0101	FUSE, NON-DETONATING	1.3G			Category 03 SW1	
0102	CORD (FUSE), DETONATING metal-clad	1.2D			Category 04 SW1	
0103	FUSE, IGNITER tubular, metal-clad	1.4G			Category 02 SW1	
0104	CORD (FUSE), DETONATING, MILD EFFECT metal-clad	1.4D			Category 02 SW1	
0105	FUSE, SAFETY	1.4S			Category 01 SW1	
0106	FUZES, DETONATING	1.1B			Category 05 SW1	
0107	FUZES, DETONATING	1.2B			Category 05 SW1	
0110	GRENADES, PRACTICE hand or rifle	1.4S			Category 01 SW1	
0113	GUANYL NITROSAMINO GUANYLIDENE HYDRAZINE, WETTED with not less than 30% water, by mass	1.1A			Category 05 SW1	
0114	GUANYL NITROSAMINO GUANYLTETRAZENE (TETRAZENE), WETTED with not less than 30% water or mi	1.1A			Category 05 SW1	
0118	HEXOLITE (HEXOTOL) dry or wetted with less than 15% water, by mass	1.1D			Category 04 SW1	
0121	IGNITERS	1.1G			Category 03 SW1	
0124	JET PERFORATING GUNS, CHARGED oil well, without detonator	1.1D			Category 04 SW1	
0129	LEAD AZIDE, WETTED with not less than 20% water, or mixture of alcohol and water, by mas	1.1A			Category 05 SW1	
0130	LEAD STYPHNATE (LEAD TRINITRORESORCINATE), WETTED with not less than 20% water, or mixtu	1.1A			Category 05 SW1	
0131	LIGHTERS, FUSE	1.4S			Category 01 SW1	
0132	DEFLAGRATING METAL SALTS OF AROMATIC NITRODERIVATIVES, N.O.S.	1.3C			Category 04 SW1	SG31
0133	MANNITOL HEXANITRATE (NITROMANNITE), WETTED with not less than 40% water, or mixture of alcohol and water, by mass	1.1D			Category 04 SW1	
0135	MERCURY FULMINATE, WETTED with not less than 20% water, or mixture of alcohol and water, by mass	1.1A			Category 05 SW1	
0136	MINES with bursting charge	1.1F			Category 05 SW1	
0137	MINES with bursting charge	1.1D			Category 04 SW1	
0138	MINES with bursting charge	1.2D			Category 04 SW1	

UN Number	PROPER SHIPPING NAME (Note: When there is more than one packing group or PSN the UN No. has been annotated with a, b, c)	Class or division	Subsidiary risk(s)	Packing Group	Stowage and Handling	Segregation
0143	NITROGLYCERIN, DESENSITIZED with not less than 40% non-volatile water-insoluble phlegmatizer, by mass	1.1D			Category 04 SW1	
0144	NITROGLYCERIN SOLUTION IN ALCOHOL with more than 1% but not more than 10% nitroglycerin	1.1D			Category 04 SW1	
0146	NITROSTARCH dry or wetted, with less than 20% water, by mass	1.1D			Category 04 SW1	
0147	NITRO UREA	1.1D			Category 04 SW1	
0150	PENTAERYTHRITE TETRANITRATE (PENTAERYTHRITOL TETRANITRATE; PETN), WETTED with not less than 25% water, by mass or PENTAERYTHRITE TETRANITRATE (PENTAERYTHRITOL TETRANITRATE; PETN), DESENSITIZED with not less than 15% phlegmatizer, by mass	1.1D			Category 04 SW1	
0151	PENTOLITE dry or wetted with less than 15% water, by mass	1.1D			Category 04 SW1	
0153	TRINITROANILINE (PICRAMIDE)	1.1D			Category 04 SW1	
0154	TRINITROPHENOL (PICRIC ACID) dry or wetted with less than 30% water, by mass	1.1D			Category 04 SW1	SG31
0155	TRINITROCHLOROBENZENE (PICRYL CHLORIDE)	1.1D			Category 04 SW1	
0159	POWDER CAKE (POWDER PASTE), WETTED with not less than 25% water, by mass	1.3C			Category 04 SW1	
0160	POWDER, SMOKELESS	1.1C			Category 04 SW1	
0161	POWDER, SMOKELESS	1.3C			Category 04 SW1	
0167	PROJECTILES with bursting charge	1.1F			Category 05 SW1	
0168	PROJECTILES with bursting charge	1.1D			Category 04 SW1	
0169	PROJECTILES with bursting charge	1.2D			Category 04 SW1	
0171	AMMUNITION, ILLUMINATING with or without burster, expelling charge or propelling charge	1.2G			Category 03 SW1	
0173	RELEASE DEVICES, EXPLOSIVE	1.4S			Category 01 SW1	
0174	RIVETS, EXPLOSIVE	1.4S			Category 01 SW1	
0180	ROCKETS with bursting charge	1.1F			Category 05 SW1	
0181	ROCKETS with bursting charge	1.1E			Category 04 SW1	
0182	ROCKETS with bursting charge	1.2E			Category 04 SW1	
0183	ROCKETS with inert head	1.3C			Category 04 SW1	
0186	ROCKET MOTORS	1.3C			Category 04 SW1	
0190	SAMPLES, EXPLOSIVE other than initiating explosive	1			Category 05 SW1	

UN Number	PROPER SHIPPING NAME (Note: When there is more than one packing group or PSN the UN No. has been annotated with a, b, c)	Class or division	Subsidiary risk(s)	Packing Group	Stowage and Handling	Segregation
0191	SIGNAL DEVICES, HAND	1.4G			Category 02 SW1	
0192	SIGNALS, RAILWAY TRACK, EXPLOSIVE	1.1G			Category 03 SW1	
0193	SIGNALS, RAILWAY TRACK, EXPLOSIVE	1.4S			Category 01 SW1	
0194	SIGNALS, DISTRESS ship	1.1G			Category 03 SW1	
0195	SIGNALS, DISTRESS ship	1.3G			Category 03 SW1	
0196	SIGNALS, SMOKE	1.1G			Category 03 SW1	
0197	SIGNALS, SMOKE	1.4G			Category 02 SW1	
0204	SOUNDING DEVICES, EXPLOSIVE	1.2F			Category 05 SW1	
0207	TETRANITROANILINE	1.1D			Category 04 SW1	
0208	TRINITROPHENYLMETHYLNITR AMINE (TETRYL)	1.1D			Category 04 SW1	
0209	TRINITROTOLUENE (TNT) dry or wetted with less than 30% water, by mass	1.1D			Category 04 SW1	
0212	TRACERS FOR AMMUNITION	1.3G			Category 03 SW1	
0213	TRINITROANISOLE	1.1D			Category 04 SW1	
0214	TRINITROBENZENE dry or wetted with less than 30% water, by mass	1.1D			Category 04 SW1	
0215	TRINITROBENZOIC ACID dry or wetted with less than 30% water, by mass	1.1D			Category 04 SW1	
0216	TRINITRO-m-CRESOL	1.1D			Category 04 SW1	SG31
0217	TRINITRONAPHTHALENE	1.1D			Category 04 SW1	
0218	TRINITROPHENETOLE	1.1D			Category 04 SW1	
0219	TRINITRORESORCINOL (STYPHNIC ACID) dry or wetted with less than 20% water, or mixture of	1.1D			Category 04 SW1	SG27
0220	UREA NITRATE dry or wetted with less than 20% water, by mass	1.1D			Category 04 SW1	
0221	WARHEADS, TORPEDO with bursting charge	1.1D			Category 04 SW1	
0222	AMMONIUM NITRATE with more than 0.2% by mass of combustible substances, including any organic substance calculated as carbon, to the exclusion of any other added substance	1.1D			Category 04 SW1	SG27
0224	BARIUM AZIDE, dry or wetted with less than 50% water, by mass	1.1A			Category 05 SW1	
0225	BOOSTERS WITH DETONATOR	1.1B			Category 05 SW1	
0226	CYCLOTETRAMETHYLENETETRA NITRAMINE (HMX; OCTOGEN), WETTED with not less than 15% water, by mass	1.1D			Category 04 SW1	
0234	SODIUM DINITRO-ortho-CRESOLATE dry or wetted with less than 15% water, by mass	1.3C			Category 04 SW1	SG31



UN Number	PROPER SHIPPING NAME (Note: When there is more than one packing group or PSN the UN No. has been annotated with a, b, c)	Class or division	Subsidiary risk(s)	Packing Group	Stowage and Handling	Segregation
0235	SODIUM PICRAMATE dry or wetted with less than 20% water, by mass	1.3C			Category 04 SW1	SG31
0236	ZIRCONIUM PICRAMATE dry or wetted with less than 20% water, by mass	1.3C			Category 04 SW1	SG31
0237	CHARGES, SHAPED, FLEXIBLE, LINEAR	1.4D			Category 02 SW1	
0238	ROCKETS, LINE-THROWING	1.2G			Category 03 SW1	
0240	ROCKETS, LINE-THROWING	1.3G			Category 03 SW1	
0241	EXPLOSIVE, BLASTING, TYPE E	1.1D			Category 04 SW1	SG34
0242	CHARGES, PROPELLING, FOR CANNON	1.3C			Category 04 SW1	
0243	AMMUNITION, INCENDIARY, WHITE PHOSPHORUS with burster, expelling charge or propelling ch	1.2H			Category 05 SW1	
0244	AMMUNITION, INCENDIARY, WHITE PHOSPHORUS with burster, expelling charge or propelling ch	1.3H			Category 05 SW1	
0245	AMMUNITION, SMOKE, WHITE PHOSPHORUS with burster, expelling charge or propelling charge	1.2H			Category 05 SW1	
0246	AMMUNITION, SMOKE, WHITE PHOSPHORUS with burster, expelling charge or propelling charge	1.3H			Category 05 SW1	
0247	AMMUNITION, INCENDIARY liquid or gel, with burster, expelling charge or propelling charge	1.3J			Category 05 SW1	
0248	CONTRIVANCES, WATER-ACTIVATED with burster, expelling charge or propelling charge	1.2L			Category 05 SW1	
0249	CONTRIVANCES, WATER-ACTIVATED with burster, expelling charge or propelling charge	1.3L			Category 05 SW1	
0250	ROCKET MOTORS WITH HYPERGOLIC LIQUIDS with or without expelling charge	1.3L			Category 05 SW1	
0254	AMMUNITION, ILLUMINATING with or without burster, expelling charge or propelling charge	1.3G			Category 03 SW1	
0255	DETONATORS, ELECTRIC for blasting	1.4B			Category 05 SW1	
0257	FUZES, DETONATING	1.4B			Category 05 SW1	
0266	OCTOLITE (OCTOL) dry or wetted with less than 15% water, by mass	1.1D			Category 04 SW1	
0267	DETONATORS, NON-ELECTRIC for blasting	1.4B			Category 05 SW1	
0268	BOOSTERS WITH DETONATOR	1.2B			Category 05 SW1	
0271	CHARGES, PROPELLING	1.1C			Category 04 SW1	
0272	CHARGES, PROPELLING	1.3C			Category 04 SW1	
0275	CARTRIDGES, POWER DEVICE	1.3C			Category 04 SW1	
0276	CARTRIDGES, POWER DEVICE	1.4C			Category 02 SW1	
0277	CARTRIDGES, OIL WELL	1.3C			Category 04 SW1	



UN Number	PROPER SHIPPING NAME (Note: When there is more than one packing group or PSN the UN No. has been annotated with a, b, c)	Class or division	Subsidiary risk(s)	Packing Group	Stowage and Handling	Segregation
0278	CARTRIDGES, OIL WELL	1.4C			Category 02 SW1	
0279	CHARGES, PROPELLING, FOR CANNON	1.1C			Category 04 SW1	
0280	ROCKET MOTORS	1.1C			Category 04 SW1	
0281	ROCKET MOTORS	1.2C			Category 04 SW1	
0282	NITROGUANIDINE (PICRITE) dry or wetted with less than 20% water, by mass	1.1D			Category 04 SW1	
0283	BOOSTERS without detonator	1.2D			Category 04 SW1	
0284	GRENADDES hand or rifle, with bursting charge	1.1D			Category 04 SW1	
0285	GRENADDES hand or rifle, with bursting charge	1.2D			Category 04 SW1	
0286	WARHEADS, ROCKET with bursting charge	1.1D			Category 04 SW1	
0287	WARHEADS, ROCKET with bursting charge	1.2D			Category 04 SW1	
0288	CHARGES, SHAPED, FLEXIBLE, LINEAR	1.1D			Category 04 SW1	
0289	CORD, DETONATING flexible	1.4D			Category 02 SW1	
0290	CORD(FUSE), DETONATING metal-clad	1.1D			Category 04 SW1	
0291	BOMBS with bursting charge	1.2F			Category 05 SW1	
0292	GRENADDES hand or rifle, with bursting charge	1.1F			Category 05 SW1	
0293	GRENADDES hand or rifle, with bursting charge	1.2F			Category 05 SW1	
0294	MINES with bursting charge	1.2F			Category 05 SW1	
0295	ROCKETS with bursting charge	1.2F			Category 05 SW1	
0296	SOUNDING DEVICES, EXPLOSIVE	1.1F			Category 05 SW1	
0297	AMMUNITION, ILLUMINATING with or without burster, expelling charge or propelling charge	1.4G			Category 02 SW1	
0299	BOMBS, PHOTO-FLASH	1.3G			Category 03 SW1	
0300	AMMUNITION, INCENDIARY with or without burster, expelling charge or propelling charge	1.4G			Category 02 SW1	
0301	AMMUNITION, TEAR-PRODUCING with burster, expelling charge or propelling charge	1.4G			Category 02 SW1	SG74
0303	AMMUNITION, SMOKE with or without burster, expelling charge or propelling charge	1.4G			Category 02 SW1	
0305	FLASH POWDER	1.3G			Category 03 SW1	
0306	TRACERS FOR AMMUNITION	1.4G			Category 02 SW1	
0312	CARTRIDGES, SIGNAL	1.4G			Category 02 SW1	
0313	SIGNALS, SMOKE	1.2G			Category 03 SW1	

UN Number	PROPER SHIPPING NAME (Note: When there is more than one packing group or PSN the UN No. has been annotated with a, b, c)	Class or division	Subsidiary risk(s)	Packing Group	Stowage and Handling	Segregation
0314	IGNITERS	1.2G			Category 03 SW1	
0315	IGNITERS	1.3G			Category 03 SW1	
0316	FUZES, IGNITING	1.3G			Category 03 SW1	
0317	FUZES, IGNITING	1.4G			Category 02 SW1	
0318	GRENADES, PRACTICE hand or rifle	1.3G			Category 03 SW1	
0319	PRIMERS, TUBULAR	1.3G			Category 03 SW1	
0320	PRIMERS, TUBULAR	1.4G			Category 02 SW1	
0321	CARTRIDGES FOR WEAPONS with bursting charge	1.2E			Category 04 SW1	
0322	ROCKET MOTORS WITH HYPERGOLIC LIQUIDS with or without expelling charge	1.2L			Category 05 SW1	
0323	CARTRIDGES, POWER DEVICE	1.4S			Category 01 SW1	
0324	PROJECTILES with bursting charge	1.2F			Category 05 SW1	
0325	IGNITERS	1.4G			Category 02 SW1	
0326	CARTRIDGES FOR WEAPONS, BLANK	1.1C			Category 04 SW1	
0327	CARTRIDGES FOR WEAPONS, BLANK or CARTRIDGES, SMALL ARMS, BLANK	1.3C			Category 04 SW1	
0328	CARTRIDGES FOR WEAPONS, INERT PROJECTILE	1.2C			Category 04 SW1	
0329	TORPEDOES with bursting charge	1.1E			Category 04 SW1	
0330	TORPEDOES with bursting charge	1.1F			Category 05 SW1	
0331	EXPLOSIVE, BLASTING, TYPE B (AGENT, BLASTING, TYPE B)	1.5D			Category 03 SW1	SG34
0332	EXPLOSIVE, BLASTING, TYPE E (AGENT, BLASTING, TYPE E)	1.5D			Category 03 SW1	SG34
0333	FIREWORKS	1.1G			Category 03 SW1	
0334	FIREWORKS	1.2G			Category 03 SW1	
0335	FIREWORKS	1.3G			Category 03 SW1	
0336	FIREWORKS	1.4G			Category 02 SW1	
0337	FIREWORKS	1.4S			Category 01 SW1	
0338	CARTRIDGES FOR WEAPONS, BLANK or CARTRIDGES, SMALL ARMS, BLANK	1.4C			Category 02 SW1	
0339	CARTRIDGES FOR WEAPONS, INERT PROJECTILE or CARTRIDGES, SMALL ARMS	1.4C			Category 02 SW1	
0340	NITROCELLULOSE dry or wetted with less than 25% water (or alcohol), by mass	1.1D			Category 04 SW1	
0341	NITROCELLULOSE unmodified or plasticized with less than 18% plasticizing substance, by mass	1.1D			Category 04 SW1	

UN Number	PROPER SHIPPING NAME (Note: When there is more than one packing group or PSN the UN No. has been annotated with a, b, c)	Class or division	Subsidiary risk(s)	Packing Group	Stowage and Handling	Segregation
0342	NITROCELLULOSE, WETTED with not less than 25% alcohol, by mass	1.3C			Category 04 SW1	
0343	NITROCELLULOSE, PLASTICIZED with not less than 18% plasticizing substance, by mass	1.3C			Category 04 SW1	
0344	PROJECTILES with bursting charge	1.4D			Category 02 SW1	
0345	PROJECTILES inert, with tracer	1.4S			Category 01 SW1	
0346	PROJECTILES with burster or expelling charge	1.2D			Category 04 SW1	
0347	PROJECTILES with burster or expelling charge	1.4D			Category 02 SW1	
0348	CARTRIDGES FOR WEAPONS with bursting charge	1.4F			Category 05 SW1	
0349	ARTICLES, EXPLOSIVE, N.O.S.	1.4S			Category 01 SW1	
0350	ARTICLES, EXPLOSIVE, N.O.S.	1.4B			Category 05 SW1	
0351	ARTICLES, EXPLOSIVE, N.O.S.	1.4C			Category 02 SW1	
0352	ARTICLES, EXPLOSIVE, N.O.S.	1.4D			Category 02 SW1	
0353	ARTICLES, EXPLOSIVE, N.O.S.	1.4G			Category 02 SW1	
0354	ARTICLES, EXPLOSIVE, N.O.S.	1.1L	See SP943		Category 05 SW1	
0355	ARTICLES, EXPLOSIVE, N.O.S.	1.2L	See SP943		Category 05 SW1	
0356	ARTICLES, EXPLOSIVE, N.O.S.	1.3L	See SP943		Category 05 SW1	
0357	SUBSTANCES, EXPLOSIVE, N.O.S.	1.1L			Category 05 SW1	
0358	SUBSTANCES, EXPLOSIVE, N.O.S.	1.2L			Category 05 SW1	
0359	SUBSTANCES, EXPLOSIVE, N.O.S.	1.3L			Category 05 SW1	
0360	DETONATOR ASSEMBLIES, NON-ELECTRIC for blasting	1.1B			Category 05 SW1	
0361	DETONATOR ASSEMBLIES, NON-ELECTRIC for blasting	1.4B			Category 05 SW1	
0362	AMMUNITION, PRACTICE	1.4G			Category 02 SW1	
0363	AMMUNITION, PROOF	1.4G			Category 02 SW1	
0364	DETONATORS FOR AMMUNITION	1.2B			Category 05 SW1	
0365	DETONATORS FOR AMMUNITION	1.4B			Category 05 SW1	
0366	DETONATORS FOR AMMUNITION	1.4S			Category 01 SW1	
0367	FUZES, DETONATING	1.4S			Category 01 SW1	
0368	FUZES, IGNITING	1.4S			Category 01 SW1	
0369	WARHEADS, ROCKET with bursting charge	1.1F			Category 05 SW1	

UN Number	PROPER SHIPPING NAME (Note: When there is more than one packing group or PSN the UN No. has been annotated with a, b, c)	Class or division	Subsidiary risk(s)	Packing Group	Stowage and Handling	Segregation
0370	WARHEADS, ROCKET with burster or expelling charge	1.4D			Category 02 SW1	
0371	WARHEADS, ROCKET with burster or expelling charge	1.4F			Category 05 SW1	
0372	GRENADES, PRACTICE hand or rifle	1.2G			Category 03 SW1	
0373	SIGNAL DEVICES, HAND	1.4S			Category 01 SW1	
0374	SOUNDING DEVICES, EXPLOSIVE	1.1D			Category 04 SW1	
0375	SOUNDING DEVICES, EXPLOSIVE	1.2D			Category 04 SW1	
0376	PRIMERS, TUBULAR	1.4S			Category 01 SW1	
0377	PRIMERS, CAP TYPE	1.1B			Category 05 SW1	
0378	PRIMERS, CAP TYPE	1.4B			Category 05 SW1	
0379	CASES, CARTRIDGE, EMPTY, WITH PRIMER	1.4C			Category 02 SW1	
0380	ARTICLES, PYROPHORIC	1.2L			Category 05 SW1	
0381	CARTRIDGES, POWER DEVICE	1.2C			Category 04 SW1	
0382	COMPONENTS, EXPLOSIVE TRAIN, N.O.S.	1.2B			Category 05 SW1	
0383	COMPONENTS, EXPLOSIVE TRAIN, N.O.S.	1.4B			Category 05 SW1	
0384	COMPONENTS, EXPLOSIVE TRAIN, N.O.S.	1.4S			Category 01 SW1	
0385	5-NITROBENZOTRIAZOL	1.1D			Category 04 SW1	
0386	TRINITROBENZENESULPHONIC ACID	1.1D			Category 04 SW1	SG31
0387	TRINITROFLUORENONE	1.1D			Category 04 SW1	
0388	TRINITROTOLUENE (TNT) AND TRINITROBENZENE MIXTURE or TRINITROTOLUENE (TNT) AND HEXANITROSTILBENE MIXTURE	1.1D			Category 04 SW1	
0389	TRINITROTOLUENE (TNT) MIXTURE CONTAINING TRINITROBENZENE AND HEXANITROSTILBENE	1.1D			Category 04 SW1	
0390	TRITONAL	1.1D			Category 04 SW1	
0391	CYCLOTRIMETHYLENETRINITRAMINE (CYCLONITE; HEXOGEN; RDX) AND CYCLOTETRAMETHYLENETETRANITRAMINE (HMX; OCTOGEN) MIXTURE, WETTED with not less than 15% water, by mass or CYCLOTRIMETHYLENETRINITRAMINE (CYCLONITE; HEXOGEN; RDX) AND CYCLOTETRAMETHYLENETETRANITRAMINE (HMX; OCTOGEN) MIXTURE, DESENSITIZED with not less than 10% phlegmatizer, by mass	1.1D			Category 04 SW1	

UN Number	PROPER SHIPPING NAME (Note: When there is more than one packing group or PSN the UN No. has been annotated with a, b, c)	Class or division	Subsidiary risk(s)	Packing Group	Stowage and Handling	Segregation
0392	HEXANITROSTILBENE	1.1D			Category 04 SW1	
0393	HEXOTONAL	1.1D			Category 04 SW1	
0394	TRINITRORESORCINOL (STYPHNIC ACID), WETTED with not less than 20% water, or mixture of a	1.1D			Category 04 SW1	SG31
0395	ROCKET MOTORS, LIQUID FUELLED	1.2J			Category 05 SW1	SG67
0396	ROCKET MOTORS, LIQUID FUELLED	1.3J			Category 05 SW1	SG67
0397	ROCKETS, LIQUID FUELLED with bursting charge	1.1J			Category 05 SW1	SG67
0398	ROCKETS, LIQUID FUELLED with bursting charge	1.2J			Category 05 SW1	SG67
0399	BOMBS WITH FLAMMABLE LIQUID with bursting charge	1.1J			Category 05 SW1	SG67
0400	BOMBS WITH FLAMMABLE LIQUID with bursting charge	1.2J			Category 05 SW1	SG67
0401	DIPICRYL SULPHIDE dry or wetted with less than 10% water, by mass	1.1D			Category 04 SW1	
0402	AMMONIUM PERCHLORATE	1.1D			Category 04 SW1	SG27
0403	FLARES, AERIAL	1.4G			Category 02 SW1	
0404	FLARES, AERIAL	1.4S			Category 01 SW1	
0405	CARTRIDGES, SIGNAL	1.4S			Category 01 SW1	
0406	DINITROSOBENZENE	1.3C			Category 04 SW1	
0407	TETRAZOL-1-ACETIC ACID	1.4C			Category 02 SW1	
0408	FUZES, DETONATING with protective features	1.1D			Category 04 SW1	
0409	FUZES, DETONATING with protective features	1.2D			Category 04 SW1	
0410	FUZES, DETONATING with protective features	1.4D			Category 02 SW1	
0411	PENTAERYTHRITOL TETRANITRATE (PENTAERYTHRITOL TETRANITRATE; PETN) with not less than 7% wax, by mass	1.1D			Category 04 SW1	
0412	CARTRIDGES FOR WEAPONS with bursting charge	1.4E			Category 03 SW1	
0413	CARTRIDGES FOR WEAPONS, BLANK	1.2C			Category 04 SW1	
0414	CHARGES, PROPELLING, FOR CANNON	1.2C			Category 04 SW1	
0415	CHARGES, PROPELLING	1.2C			Category 04 SW1	
0417	CARTRIDGES FOR WEAPONS, INERT PROJECTILE or CARTRIDGES, SMALL ARMS	1.3C			Category 04 SW1	
0418	FLARES, SURFACE	1.1G			Category 03 SW1	
0419	FLARES, SURFACE	1.2G			Category 03 SW1	



UN Number	PROPER SHIPPING NAME (Note: When there is more than one packing group or PSN the UN No. has been annotated with a, b, c)	Class or division	Subsidiary risk(s)	Packing Group	Stowage and Handling	Segregation
0420	FLARES, AERIAL	1.1G			Category 03 SW1	
0421	FLARES, AERIAL	1.2G			Category 03 SW1	
0424	PROJECTILES inert, with tracer	1.3G			Category 03 SW1	
0425	PROJECTILES inert, with tracer	1.4G			Category 02 SW1	
0426	PROJECTILES with burster or expelling charge	1.2F			Category 05 SW1	
0427	PROJECTILES with burster or expelling charge	1.4F			Category 05 SW1	
0428	ARTICLES, PYROTECHNIC for technical purposes	1.1G			Category 03 SW1	
0429	ARTICLES, PYROTECHNIC for technical purposes	1.2G			Category 03 SW1	
0430	ARTICLES, PYROTECHNIC for technical purposes	1.3G			Category 03 SW1	
0431	ARTICLES, PYROTECHNIC for technical purposes	1.4G			Category 02 SW1	
0432	ARTICLES, PYROTECHNIC for technical purposes	1.4S			Category 01 SW1	
0433	POWDER CAKE (POWDER PASTE), WETTED with not less than 17% alcohol, by mass	1.1C			Category 04 SW1	
0434	PROJECTILES with burster or expelling charge	1.2G			Category 03 SW1	
0435	PROJECTILES with burster or expelling charge	1.4G			Category 02 SW1	
0436	ROCKETS with expelling charge	1.2C			Category 04 SW1	
0437	ROCKETS with expelling charge	1.3C			Category 04 SW1	
0438	ROCKETS with expelling charge	1.4C			Category 02 SW1	
0439	CHARGES, SHAPED without detonator	1.2D			Category 04 SW1	
0440	CHARGES, SHAPED without detonator	1.4D			Category 02 SW1	
0441	CHARGES, SHAPED without detonator	1.4S			Category 01 SW1	
0442	CHARGES, EXPLOSIVE, COMMERCIAL without detonator	1.1D			Category 04 SW1	
0443	CHARGES, EXPLOSIVE, COMMERCIAL without detonator	1.2D			Category 04 SW1	
0444	CHARGES, EXPLOSIVE, COMMERCIAL without detonator	1.4D			Category 02 SW1	
0445	CHARGES, EXPLOSIVE, COMMERCIAL without detonator	1.4S			Category 01 SW1	
0446	CASES, COMBUSTIBLE, EMPTY, WITHOUT PRIMER	1.4C			Category 02 SW1	
0447	CASES, COMBUSTIBLE, EMPTY, WITHOUT PRIMER	1.3C			Category 04 SW1	
0448	5-MERCAPTOTETRAZOL-1-ACETIC ACID	1.4C			Category 02 SW1	
0449	TORPEDOES, LIQUID-FUELLED with or without bursting charge	1.1J			Category 05 SW1	SG67

UN Number	PROPER SHIPPING NAME (Note: When there is more than one packing group or PSN the UN No. has been annotated with a, b, c)	Class or division	Subsidiary risk(s)	Packing Group	Stowage and Handling	Segregation
0450	TORPEDOES, LIQUID-FUELLED with inert head	1.3J			Category 05 SW1	SG67
0451	TORPEDOES with bursting charge	1.1D			Category 04 SW1	
0452	GRENADES, PRACTICE hand or rifle	1.4G			Category 02 SW1	
0453	ROCKETS, LINE-THROWING	1.4G			Category 02 SW1	
0454	IGNITERS	1.4S			Category 01 SW1	
0455	DETONATORS, NON-ELECTRIC for blasting	1.4S			Category 01 SW1	
0456	DETONATORS, ELECTRIC for blasting	1.4S			Category 01 SW1	
0457	CHARGES, BURSTING, PLASTICS BONDED	1.1D			Category 04 SW1	
0458	CHARGES, BURSTING, PLASTICS BONDED	1.2D			Category 04 SW1	
0459	CHARGES, BURSTING, PLASTICS BONDED	1.4D			Category 02 SW1	
0460	CHARGES, BURSTING, PLASTICS BONDED	1.4S			Category 01 SW1	
0461	COMPONENTS, EXPLOSIVE TRAIN, N.O.S.	1.1B			Category 05 SW1	
0462	ARTICLES, EXPLOSIVE, N.O.S.	1.1C			Category 04 SW1	
0463	ARTICLES, EXPLOSIVE, N.O.S.	1.1D			Category 04 SW1	
0464	ARTICLES, EXPLOSIVE, N.O.S.	1.1E			Category 04 SW1	
0465	ARTICLES, EXPLOSIVE, N.O.S.	1.1F			Category 05 SW1	
0466	ARTICLES, EXPLOSIVE, N.O.S.	1.2C			Category 04 SW1	
0467	ARTICLES, EXPLOSIVE, N.O.S.	1.2D			Category 04 SW1	
0468	ARTICLES, EXPLOSIVE, N.O.S.	1.2E			Category 04 SW1	
0469	ARTICLES, EXPLOSIVE, N.O.S.	1.2F			Category 05 SW1	
0470	ARTICLES, EXPLOSIVE, N.O.S.	1.3C			Category 04 SW1	
0471	ARTICLES, EXPLOSIVE, N.O.S.	1.4E			Category 03 SW1	
0472	ARTICLES, EXPLOSIVE, N.O.S.	1.4F			Category 05 SW1	
0473	SUBSTANCES, EXPLOSIVE, N.O.S.	1.1A			Category 05 SW1	
0474	SUBSTANCES, EXPLOSIVE, N.O.S.	1.1C			Category 04 SW1	
0475	SUBSTANCES, EXPLOSIVE, N.O.S.	1.1D			Category 04 SW1	
0476	SUBSTANCES, EXPLOSIVE, N.O.S.	1.1G			Category 03 SW1	
0477	SUBSTANCES, EXPLOSIVE, N.O.S.	1.3C			Category 04 SW1	

UN Number	PROPER SHIPPING NAME (Note: When there is more than one packing group or PSN the UN No. has been annotated with a, b, c)	Class or division	Subsidiary risk(s)	Packing Group	Stowage and Handling	Segregation
0478	SUBSTANCES, EXPLOSIVE, N.O.S.	1.3G			Category 03 SW1	
0479	SUBSTANCES, EXPLOSIVE, N.O.S.	1.4C			Category 02 SW1	
0480	SUBSTANCES, EXPLOSIVE, N.O.S.	1.4D			Category 02 SW1	
0481	SUBSTANCES, EXPLOSIVE, N.O.S.	1.4S			Category 01 SW1	
0482	SUBSTANCES, EXPLOSIVE, VERY INSENSITIVE (SUBSTANCES, EVI), N.O.S.	1.5D			Category 03 SW1	
0483	CYCLOTRIMETHYLENETRINITRAMINE (CYCLONITE; HEXOGEN; RDX), DESENSITIZED	1.1D			Category 04 SW1	
0484	CYCLOTETRAMETHYLENETETRAMINE (OCTOGEN; HMX), DESENSITIZED	1.1D			Category 04 SW1	
0485	SUBSTANCES, EXPLOSIVE, N.O.S.	1.4G			Category 02 SW1	
0486	ARTICLES, EXPLOSIVE, EXTREMELY INSENSITIVE (ARTICLES, EEI)	1.6N			Category 03 SW1	
0487	SIGNALS, SMOKE	1.3G			Category 03 SW1	
0488	AMMUNITION, PRACTICE	1.3G			Category 03 SW1	
0489	DINITROGLYCOLURIL (DINGU)	1.1D			Category 04 SW1	
0490	NITROTRIAZOLONE (NTO)	1.1D			Category 04 SW1	
0491	CHARGES, PROPELLING	1.4C			Category 02 SW1	
0492	SIGNALS, RAILWAY TRACK, EXPLOSIVE	1.3G			Category 03 SW1	
0493	SIGNALS, RAILWAY TRACK, EXPLOSIVE	1.4G			Category 02 SW1	
0494	JET PERFORATING GUNS, CHARGED oil well, without detonator	1.4D			Category 02 SW1	
0495	PROPELLANT, LIQUID	1.3C			Category 04 SW1	
0496	OCTONAL	1.1D			Category 04 SW1	
0497	PROPELLANT, LIQUID	1.1C			Category 04 SW1	
0498	PROPELLANT, SOLID	1.1C			Category 04 SW1	
0499	PROPELLANT, SOLID	1.3C			Category 04 SW1	
0500	DETONATOR ASSEMBLIES, NON-ELECTRIC for blasting	1.4S			Category 01 SW1	
0501	PROPELLANT, SOLID	1.4C			Category 02 SW1	
0502	ROCKETS with inert head	1.2C			Category 04 SW1	
0503	AIR BAG INFLATORS or AIR BAG MODULES or SEAT-BELT PRETENSIONERS	1.4G			Category 02 SW1	
0504	1H-TETRAZOLE	1.1D			Category 04 SW1	
0505	SIGNALS, DISTRESS, ship	1.4G			Category 02 SW1	



UN Number	PROPER SHIPPING NAME (Note: When there is more than one packing group or PSN the UN No. has been annotated with a, b, c)	Class or division	Subsidiary risk(s)	Packing Group	Stowage and Handling	Segregation
0506	SIGNALS, DISTRESS, ship	1.4S			Category 01 SW1	
0507	SIGNALS, SMOKE	1.4S			Category 01 SW1	
0508	1-HYDROXYBENZOTRIAZOLE, ANHYDROUS, dry or wetted with less than 20% water, by mass	1.3C			Category 04 SW1	
0509	POWDER, SMOKELESS	1.4C			Category 02 SW1	
1001	ACETYLENE, DISSOLVED	2.1			Category D SW1 SW2	SG46
1002	AIR, COMPRESSED	2.2			Category A	
1003	AIR, REFRIGERATED LIQUID	2.2	5.1		Category D	
1005	AMMONIA, ANHYDROUS	2.3	8		Category D SW2	SG35 SG46
1006	ARGON, COMPRESSED	2.2			Category A	
1008	BORON TRIFLUORIDE	2.3	8		Category D SW2	
1009	BROMOTRIFLUOROMETHANE (REFRIGERANT GAS R 13B1)	2.2			Category A	
1010	BUTADIENES, STABILIZED or BUTADIENES AND HYDROCARBON MIXTURE, STABILIZED with more than 40% butadienes	2.1			Category B SW2	
1011	BUTANE	2.1			Category E SW2	
1012	BUTYLENE	2.1			Category E SW2	
1013	CARBON DIOXIDE	2.2			Category A	
1016	CARBON MONOXIDE, COMPRESSED	2.3	2.1		Category D SW2	
1017	CHLORINE	2.3	5.1/8 P		Category D SW2	SG6 SG19
1018	CHLORODIFLUOROMETHANE (REFRIGERANT GAS R 22)	2.2			Category A	
1020	CHLOROPENTAFLUOROETHANE (REFRIGERANT GAS R 115)	2.2			Category A	
1021	1-CHLORO-1,2,2,2-TETRAFLUOROETHANE (REFRIGERANT GAS R 124)	2.2			Category A	
1022	CHLOROTRIFLUOROMETHANE (REFRIGERANT GAS R 13)	2.2			Category A	
1023	COAL GAS, COMPRESSED	2.3	2.1		Category D SW2	
1026	CYANOGEN	2.3	2.1		Category D SW2	
1027	CYCLOPROPANE	2.1			Category E SW2	
1028	DICHLORODIFLUOROMETHANE (REFRIGERANT GAS R 12)	2.2			Category A	
1029	DICHLOROFLUOROMETHANE (REFRIGERANT GAS R 21)	2.2			Category A	
1030	1,1-DIFLUOROETHANE (REFRIGERANT GAS R 152a)	2.1			Category B SW2	
1032	DIMETHYLAMINE, ANHYDROUS	2.1			Category D SW2	
1033	DIMETHYL ETHER	2.1			Category B SW2	
1035	ETHANE	2.1			Category E SW2	

UN Number	PROPER SHIPPING NAME (Note: When there is more than one packing group or PSN the UN No. has been annotated with a, b, c)	Class or division	Subsidiary risk(s)	Packing Group	Stowage and Handling	Segregation
1036	ETHYLAMINE	2.1			Category D SW2	
1037	ETHYL CHLORIDE	2.1			Category B SW2	
1038	ETHYLENE, REFRIGERATED LIQUID	2.1			Category D SW2	
1039	ETHYL METHYL ETHER	2.1			Category B SW2	
1040	ETHYLENE OXIDE or ETHYLENE OXIDE WITH NITROGEN up to a total pressure of 1MPa (10 bar) at 50°C	2.3	2.1		Category D SW2	
1041	ETHYLENE OXIDE AND CARBON DIOXIDE MIXTURE with more than 9% but not more than 87% ethyle	2.1			Category B SW2	
1043	FERTILIZER AMMONIATING SOLUTION with free ammonia	2.2			Category E SW2	
1044	FIRE EXTINGUISHERS with compressed or liquefied gas	2.2			Category A	
1045	FLUORINE, COMPRESSED	2.3	5.1/8		Category D SW2	SG6 SG19
1046	HELIUM, COMPRESSED	2.2			Category A	
1048	HYDROGEN BROMIDE, ANHYDROUS	2.3	8		Category D SW2	
1049	HYDROGEN, COMPRESSED	2.1			Category E SW2	SG46
1050	HYDROGEN CHLORIDE, ANHYDROUS	2.3	8		Category D SW2	
1051	HYDROGEN CYANIDE, STABILIZED containing less than 3% water	6.1	3P	I	Category D SW2	
1052	HYDROGEN FLUORIDE, ANHYDROUS	8	6.1	I	Category D SW2	
1053	HYDROGEN SULPHIDE	2.3	2.1		Category D SW2	
1055	ISOBUTYLENE	2.1			Category E SW2	
1056	KRYPTON, COMPRESSED	2.2			Category A	
1057	LIGHTERS or LIGHTER REFILLS containing flammable gas	2.1			Category B SW2	
1058	LIQUEFIED GASES non-flammable, charged with nitrogen, carbon dioxide or air	2.2			Category A	
1060	METHYLACETYLENE AND PROPADIENE MIXTURE, STABILIZED	2.1			Category B SW2	
1061	METHYLAMINE, ANHYDROUS	2.1			Category B SW2	
1062	METHYL BROMIDE with not more than 2.0% chloropicrin	2.3			Category D SW2	
1063	METHYL CHLORIDE (REFRIGERANT GAS R 40)	2.1			Category D SW2	
1064	METHYL MERCAPTAN	2.3	2.1 P		Category D SW2	
1065	NEON, COMPRESSED	2.2			Category A	
1066	NITROGEN, COMPRESSED	2.2			Category A	
1067	DINITROGEN TETROXIDE (NITROGEN DIOXIDE)	2.3	5.1/8		Category D SW2	SG6 SG19
1069	NITROSYL CHLORIDE	2.3	8		Category D SW2	

UN Number	PROPER SHIPPING NAME (Note: When there is more than one packing group or PSN the UN No. has been annotated with a, b, c)	Class or division	Subsidiary risk(s)	Packing Group	Stowage and Handling	Segregation
1070	NITROUS OXIDE	2.2	5.1		Category A SW2	
1071	OIL GAS, COMPRESSED	2.3	2.1		Category D SW2	
1072	OXYGEN, COMPRESSED	2.2	5.1		Category A	
1073	OXYGEN, REFRIGERATED LIQUID	2.2	5.1		Category D	
1075	PETROLEUM GASES, LIQUEFIED	2.1			Category E SW2	
1076	PHOSGENE	2.3	8		Category D SW2	
1077	PROPYLENE	2.1			Category E SW2	
1078	REFRIGERANT GAS, N.O.S.	2.2			Category A	
1079	SULPHUR DIOXIDE	2.3	8		Category D SW2	
1080	SULPHUR HEXAFLUORIDE	2.2			Category A	
1081	TETRAFLUROETHYLENE, STABILIZED	2.1			Category E SW2	
1082	TRIFLUOROCHLOROETHYLENE, STABILIZED	2.3	2.1		Category D SW2	
1083	TRIMETHYLAMINE, ANHYDROUS	2.1			Category B SW2	
1085	VINYL BROMIDE, STABILIZED	2.1			Category B SW2	
1086	VINYL CHLORIDE, STABILIZED	2.1			Category B SW2	
1087	VINYL METHYL ETHER, STABILIZED	2.1			Category B SW2	
1088	ACETAL	3		II	Category E	
1089	ACETALDEHYDE	3		I	Category E	
1090	ACETONE (ACETONE SOLUTIONS)	3		II	Category E	
1091	ACETONE OILS	3		II	Category B	
1092	ACROLEIN, STABILIZED	6.1	3P	I	Category D SW2	
1093	ACRYLONITRILE, STABILIZED	3	6.1	I	Category E SW2	
1098	ALLYL ALCOHOL	6.1	3	I	Category D SW2	
1099	ALLYL BROMIDE	3	6.1 P	I	Category B SW2	
1100	ALLYL CHLORIDE	3	6.1	I	Category E SW2	
1104	AMYL ACETATES	3		III	Category A	
1105	PENTANOLS	3		II	Category B	
1105	PENTANOLS	3		III	Category A	
1106	AMYLAMINES	3	8	II	Category B	
1106	AMYLAMINES	3	8	III	Category A	
1107	AMYL CHLORIDES	3		II	Category B	
1108	1-PENTENE (n-AMYLENE)	3		I	Category E	
1109	AMYL FORMATES	3		III	Category A	
1110	n-AMYL METHYL KETONE	3		III	Category A	

UN Number	PROPER SHIPPING NAME (Note: When there is more than one packing group or PSN the UN No. has been annotated with a, b, c)	Class or division	Subsidiary risk(s)	Packing Group	Stowage and Handling	Segregation
1111	AMYL MERCAPTANS	3		II	Category B	SG50 SG57
1112	AMYL NITRATES	3		III	Category A SW2	
1113	AMYL NITRITE	3		II	Category E SW2	
1114	BENZENE	3		II	Category B SW2	
1120	BUTANOLS	3		II	Category B	
1120	BUTANOLS	3		III	Category A	
1123	BUTYL ACETATES	3		II	Category B	
1123	BUTYL ACETATES	3		III	Category A	
1125	n-BUTYLAMINE	3	8	II	Category B SW2	
1126	1-BROMOBUTANE	3		II	Category B SW2	
1127	CHLOROBUTANES	3		II	Category B	
1128	n-BUTYL FORMATE	3		II	Category B	
1129	BUTYRALDEHYDE	3		II	Category B	
1130	CAMPHOR OIL	3		III	Category A	
1131	CARBON DISULPHIDE	3	6.1	I	Category D SW2	SG63
1133	ADHESIVES containing flammable liquid	3		I	Category E	
1133	ADHESIVES containing flammable liquid	3		II	Category B	
1133	ADHESIVES containing flammable liquid	3		III	Category A	
1134	CHLOROBENZENE	3		III	Category A	
1135	ETHYLENE CHLOROXYDRIN	6.1	3	I	Category D SW2	
1136	COAL TAR DISTILLATES, FLAMMABLE	3		II	Category B	
1136	COAL TAR DISTILLATES, FLAMMABLE	3		III	Category A	
1139	COATING SOLUTION (includes surface treatments or coatings used for industrial purposes such as vehicle under-coating, drum or barrel lining)	3		I	Category E	
1139	COATING SOLUTION (includes surface treatments or coatings used for industrial purposes such as vehicle under-coating, drum or barrel lining)	3		II	Category B	
1139	COATING SOLUTION (includes surface treatments or coatings used for industrial purposes such as vehicle under-coating, drum or barrel lining)	3		III	Category A	
1143	CROTONALDEHYDE or CROTONALDEHYDE, STABILIZED	6.1	3P	I	Category D SW2	
1144	CROTONYLENE	3		I	Category E	
1145	CYCLOHEXANE	3		II	Category E	
1146	CYCLOPENTANE	3		II	Category E	
1147	DECAHYDRONAPHTHALENES	3		III	Category A	
1148	DIACETONE ALCOHOL	3		II	Category B	
1148	DIACETONE ALCOHOL	3		III	Category A	
1149	DIBUTYL ETHERS	3		III	Category A	

UN Number	PROPER SHIPPING NAME (Note: When there is more than one packing group or PSN the UN No. has been annotated with a, b, c)	Class or division	Subsidiary risk(s)	Packing Group	Stowage and Handling	Segregation
1150	1,2-DICHLOROETHYLENE	3		II	Category B	
1152	DICHLOROPENTANES	3		III	Category A	
1153	ETHYLENE GLYCOL DIETHYL ETHER	3		II	Category A	
1153	ETHYLENE GLYCOL DIETHYL ETHER	3		III	Category A	
1154	DIETHYLAMINE	3	8	II	Category E SW2	
1155	DIETHYL ETHER (ETHYL ETHER)	3		I	Category E SW2	
1156	DIETHYL KETONE	3		II	Category B	
1157	DIISOBUTYL KETONE	3		III	Category A	
1158	DIISOPROPYLAMINE	3	8	II	Category B	
1159	DIISOPROPYL ETHER	3		II	Category E SW2	
1160	DIMETHYLAMINE, AQUEOUS SOLUTION	3	8	II	Category B	SG35
1161	DIMETHYL CARBONATE	3		II	Category B	
1162	DIMETHYLDICHLOROSILANE	3	8	II	Category B SW2	
1163	DIMETHYLHYDRAZINE, UNSYMMETRICAL	6.1	3/8P	I	Category D SW2	SG5 SG8 SG13 SG35
1164	DIMETHYL SULPHIDE	3		II	Category E SW2	
1165	DIOXANE	3		II	Category B	
1166	DIOXOLANE	3		II	Category B SW2	
1167	DIVINYL ETHER, STABILIZED	3		I	Category E SW2	
1169	EXTRACTS, AROMATIC, LIQUID	3		II	Category B	
1169	EXTRACTS, AROMATIC, LIQUID	3		III	Category A	
1170	ETHANOL (ETHYL ALCOHOL) or ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)	3		II	Category A	
1170	ETHANOL (ETHYL ALCOHOL) or ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)	3		III	Category A	
1171	ETHYLENE GLYCOL MONOETHYL ETHER	3		III	Category A	
1172	ETHYLENE GLYCOL MONOETHYL ETHER ACETATE	3		III	Category A	
1173	ETHYL ACETATE	3		II	Category B	
1175	ETHYLBENZENE	3		II	Category B	
1176	ETHYL BORATE	3		II	Category B	
1177	2-ETHYLBUTYL ACETATE	3		III	Category A	
1178	2-ETHYLBUTYRALDEHYDE	3		II	Category B	
1179	ETHYL BUTYL ETHER	3		II	Category B	
1180	ETHYL BUTYRATE	3		III	Category A	
1181	ETHYL CHLOROACETATE	6.1	3	II	Category A	
1182	ETHYL CHLOROFORMATE	6.1	"3/8	I	Category D SW2	SG5 SG8
1183	ETHYLDICHLOROSILANE	4.3	"3/8	I	Category D SW2	SG5 SG7 SG8 SG13

UN Number	PROPER SHIPPING NAME (Note: When there is more than one packing group or PSN the UN No. has been annotated with a, b, c)	Class or division	Subsidiary risk(s)	Packing Group	Stowage and Handling	Segregation
1184	ETHYLENE DICHLORIDE	3	6.1	II	Category B SW2	
1185	ETHYLENEIMINE, STABILIZED	6.1	3	I	Category D SW2	
1188	ETHYLENE GLYCOL MONOMETHYL ETHER	3		III	Category A	
1189	ETHYLENE GLYCOL MONOMETHYL ETHER ACETATE	3		III	Category A	
1190	ETHYL FORMATE	3		II	Category E	
1191	OCTYL ALDEHYDES	3		III	Category A	
1192	ETHYL LACTATE	3		III	Category A	
1193	ETHYL METHYL KETONE (METHYL ETHYL KETONE)	3		II	Category B	
1194	ETHYL NITRITE SOLUTION	3	6.1	I	Category D SW2	
1195	ETHYL PROPIONATE	3		II	Category B	
1196	ETHYLTRICHLOROSILANE	3	8	II	Category B SW2	
1197	EXTRACTS, FLAVOURING, LIQUID	3		II	Category B	
1197	EXTRACTS, FLAVOURING, LIQUID	3		III	Category A	
1198	FORMALDEHYDE SOLUTION, FLAMMABLE	3	8	III	Category A SW2	
1199	FURALDEHYDES	6.1	3	II	Category A	
1201	FUSEL OIL	3		II	Category B	
1201	FUSEL OIL	3		III	Category A	
1202	GAS OIL or DIESEL FUEL or HEATING OIL, LIGHT	3		III	Category A	
1203	MOTOR SPIRIT or GASOLINE or PETROL	3		II	Category E	
1204	NITROGLYCERIN SOLUTION IN ALCOHOL with not more than 1% nitroglycerin	3		II	Category B	
1206	HEPTANES	3		II	Category B	
1207	HEXALDEHYDE	3		III	Category A	
1208	HEXANES	3		II	Category E	
1210	PRINTING INK flammable or PRINTING INK RELATED MATERIAL (including printing ink thinning or reducing compound), flammable	3		I	Category E	
1210	PRINTING INK flammable or PRINTING INK RELATED MATERIAL (including printing ink thinning or reducing compound), flammable	3		II	Category B	
1210	PRINTING INK flammable or PRINTING INK RELATED MATERIAL (including printing ink thinning or reducing compound), flammable	3		III	Category A	
1212	ISOBUTANOL (ISOBUTYL ALCOHOL)	3		III	Category A	
1213	ISOBUTYL ACETATE	3		II	Category B	
1214	ISOBUTYLAMINE	3	8	II	Category B SW2	
1216	ISOCTENES	3		II	Category B	
1218	ISOPRENE, STABILIZED	3		I	Category E	
1219	ISOPROPANOL (ISOPROPYL ALCOHOL)	3		II	Category B	
1220	ISOPROPYL ACETATE	3		II	Category B	



UN Number	PROPER SHIPPING NAME (Note: When there is more than one packing group or PSN the UN No. has been annotated with a, b, c)	Class or division	Subsidiary risk(s)	Packing Group	Stowage and Handling	Segregation
1221	ISOPROPYLAMINE	3	8	I	Category E SW2	
1222	ISOPROPYL NITRATE	3		II	Category D	
1223	KEROSENE	3		III	Category A	
1224	KETONES, LIQUID, N.O.S.	3		II	Category B	
1224	KETONES, LIQUID, N.O.S.	3		III	Category A	
1228	MERCAPTANS, LIQUID, FLAMMABLE, TOXIC, N.O.S. or MERCAPTAN MIXTURE, LIQUID, FLAMMABLE, TO	3	6.1	II	Category B SW2	SG50 SG57
1228	MERCAPTANS, LIQUID, FLAMMABLE, TOXIC, N.O.S. or MERCAPTAN MIXTURE, LIQUID, FLAMMABLE, N.O.S	3	6.1	III	Category B SW2	SG50 SG57
1229	MESITYL OXIDE	3		III	Category A	
1230	METHANOL	3	6.1	II	Category B SW2	
1231	METHYL ACETATE	3		II	Category B	
1233	METHYLAMYL ACETATE	3		III	Category A	
1234	METHYLAL	3		II	Category E	
1235	METHYLAMINE, AQUEOUS SOLUTION	3		II	Category E	SG35 SG54
1237	METHYL BUTYRATE	3		II	Category B	
1238	METHYL CHLOROFORMATE	6.1	"3/8	I	Category D SW2	SG5 SG8
1239	METHYL CHLOROMETHYL ETHER	6.1	3	I	Category D SW2	
1242	METHYLDICHLOROSILANE	4.3	"3/8	I	Category D SW2	SG5 SG7 SG8 SG13
1243	METHYL FORMATE	3		I	Category E	
1244	METHYLHYDRAZINE	6.1	"3/8	I	Category D SW2	SG5 SG8 SG13 SG35
1245	METHYL ISOBUTYL KETONE	3		II	Category B	
1246	METHYL ISOPROPENYL KETONE, STABILIZED	3		II	Category B	
1247	METHYL METHACRYLATE MONOMER, STABILIZED	3		II	Category B SW2	
1248	METHYL PROPIONATE	3		II	Category B	
1249	METHYL PROPYL KETONE	3		II	Category B	
1250	METHYLTRICHLOROSILANE	3	8	II	Category B SW2	
1251	METHYL VINYL KETONE, STABILIZED	6.1	"3/8	I	Category D SW2	SG5 SG8
1259	NICKEL CARBONYL	6.1	3P	I	Category D SW2	SG63
1261	NITROMETHANE	3		II	Category A	
1262	OCTANES	3		II	Category B	
1263	PAINT (including paint, lacquer, enamel, stain, shellac solutions, varnish, polish, liquid filler and liquid lacquer base) or PAINT RELATED MATERIAL (including paint thinning or reducing compound)	3		I	Category E	

UN Number	PROPER SHIPPING NAME (Note: When there is more than one packing group or PSN the UN No. has been annotated with a, b, c)	Class or division	Subsidiary risk(s)	Packing Group	Stowage and Handling	Segregation
1263	PAINT (including paint, lacquer, enamel, stain, shellac solutions, varnish, polish, liquid filler and liquid lacquer base) or PAINT RELATED MATERIAL (including paint thinning or reducing compound)	3		II	Category B	
1263	PAINT (including paint, lacquer, enamel, stain, shellac solutions, varnish, polish, liquid filler and liquid lacquer base) or PAINT RELATED MATERIAL (including paint thinning or reducing compound)	3		III	Category A	
1264	PARALDEHYDE	3		III	Category A	
1265	PENTANES, liquid	3		I	Category E	
1265	PENTANES, liquid	3		II	Category E	
1266	PERFUMERY PRODUCTS with flammable solvents	3		II	Category B	
1266	PERFUMERY PRODUCTS with flammable solvents	3		III	Category A	
1267	PETROLEUM CRUDE OIL	3		I	Category E	
1267	PETROLEUM CRUDE OIL	3		II	Category B	
1267	PETROLEUM CRUDE OIL	3		III	Category A	
1268	PETROLEUM DISTILLATES, N.O.S. or PETROLEUM PRODUCTS, N.O.S.	3		I	Category E	
1268	PETROLEUM DISTILLATES, N.O.S. or PETROLEUM PRODUCTS, N.O.S.	3		II	Category B	
1268	PETROLEUM DISTILLATES, N.O.S. or PETROLEUM PRODUCTS, N.O.S.	3		III	Category A	
1272	PINE OIL	3		III	Category A	
1274	n-PROPANOL (PROPYL ALCOHOL, NORMAL)	3		II	Category B	
1274	n-PROPANOL (PROPYL ALCOHOL, NORMAL)	3		III	Category A	
1275	PROPIONALDEHYDE	3		II	Category E	
1276	n-PROPYL ACETATE	3		II	Category B	
1277	PROPYLAMINE	3	8	II	Category E SW2	
1278	1-CHLOROPROPANE	3		II	Category E	
1279	1,2-DICHLOROPROPANE	3		II	Category B	
1280	PROPYLENE OXIDE	3		I	Category E SW2	
1281	PROPYL FORMATES	3		II	Category B	
1282	PYRIDINE	3		II	Category B SW2	
1286	ROSIN OIL	3		II	Category B	
1286	ROSIN OIL	3		III	Category A	
1287	RUBBER SOLUTION	3		II	Category B	
1287	RUBBER SOLUTION	3		III	Category A	
1288	SHALE OIL	3		II	Category B	
1288	SHALE OIL	3		III	Category A	
1289	SODIUM METHYLATE SOLUTION in alcohol	3	8	II	Category B	
1289	SODIUM METHYLATE SOLUTION in alcohol	3	8	III	Category A	
1292	TETRAETHYL SILICATE	3		III	Category A	
1293	TINCTURES, MEDICINAL	3		II	Category B	



UN Number	PROPER SHIPPING NAME (Note: When there is more than one packing group or PSN the UN No. has been annotated with a, b, c)	Class or division	Subsidiary risk(s)	Packing Group	Stowage and Handling	Segregation
1293	TINCTURES, MEDICINAL	3		III	Category A	
1294	TOLUENE	3		II	Category B	
1295	TRICHLOROSILANE	4.3	"8/3	I	Category D SW2	SG5 SG7 SG8 SG13 SG72
1296	TRIETHYLAMINE	3	8	II	Category B SW2	
1297	TRIMETHYLAMINE, AQUEOUS SOLUTION not more than 50% trimethylamine, by mass	3	8	I	Category D SW2	SG54
1297	TRIMETHYLAMINE, AQUEOUS SOLUTION not more than 50% trimethylamine, by mass	3	8	II	Category B SW2	SG54
1297	TRIMETHYLAMINE, AQUEOUS SOLUTION not more than 50% trimethylamine, by mass	3	8	III	Category A SW2	SG54
1298	TRIMETHYLCHLOROSILANE	3	8	II	Category E SW2	
1299	TURPENTINE	3		III	Category A	
1300	TURPENTINE SUBSTITUTE	3		II	Category B	
1300	TURPENTINE SUBSTITUTE	3		III	Category A	
1301	VINYL ACETATE, STABILIZED	3		II	Category B	
1302	VINYL ETHYL ETHER, STABILIZED	3		I	Category D	
1303	VINYLDENE CHLORIDE, STABILIZED	3	P	I	Category E SW2	
1304	VINYL ISOBUTYL ETHER, STABILIZED	3		II	Category B	
1305	VINYLTRICHLOROSILANE	3	8	II	Category B SW2	
1306	WOOD PRESERVATIVES, LIQUID	3		II	Category B	
1306	WOOD PRESERVATIVES, LIQUID	3		III	Category A	
1307	XYLENES	3		II	Category B	
1307	XYLENES	3		III	Category A	
1308	ZIRCONIUM, SUSPENDED IN A FLAMMABLE LIQUID	3		I	Category D	
1308	ZIRCONIUM, SUSPENDED IN A FLAMMABLE LIQUID	3		II	Category B	
1308	ZIRCONIUM, SUSPENDED IN A FLAMMABLE LIQUID	3		III	Category B	
1309	ALUMINIUM POWDER, COATED	4.1		II	Category A H1	SG17 SG32 SG35 SG36 SG52
1309	ALUMINIUM POWDER, COATED	4.1		III	Category A H1	SG17 SG32 SG35 SG36 SG52
1310	AMMONIUM PICRATE, WETTED with not less than 10% water, by mass	4.1		I	Category D	SG7 SG30
1312	BORNEOL	4.1		III	Category A	
1313	CALCIUM RESINATE	4.1		III	Category A	
1314	CALCIUM RESINATE, FUSED	4.1		III	Category A	
1318	COBALT RESINATE, PRECIPITATED	4.1		III	Category A	
1320	DINITROPHENOL, WETTED with not less than 15% water, by mass	4.1		I	Category E	SG7 SG30

UN Number	PROPER SHIPPING NAME (Note: When there is more than one packing group or PSN the UN No. has been annotated with a, b, c)	Class or division	Subsidiary risk(s)	Packing Group	Stowage and Handling	Segregation
1321	DINITROPHENOLATES, WETTED with not less than 15% water, by mass	4.1	6.1P	I	Category E	SG7 SG30
1322	DINITRORESORCINOL, WETTED with not less than 15% water, by mass	4.1		I	Category E	SG7 SG30
1323	FERROCERIUM	4.1		II	Category A	
1324	FILMS, NITROCELLULOSE BASE gelatin coated, except scrap	4.1		III	Category D	SG7
1325	FLAMMABLE SOLID, ORGANIC, N.O.S.	4.1		II	Category B	
1325	FLAMMABLE SOLID, ORGANIC, N.O.S.	4.1		III	Category B	
1326	HAFNIUM POWDER, WETTED with not less than 25% water (a visible excess of water must be present) (a) mechanically produced, particle size less than 53 microns; (b) chemically produced, particle size less than 840 microns	4.1		II	Category E	SG17
1327	HAY, STRAW or BHUSA	4.1			Category A SW10	SG23
1328	HEXAMETHYLENETETRAMINE	4.1		III	Category A	
1330	MANGANESE RESINATE	4.1		III	Category A	
1331	MATCHES, 'STRIKE ANYWHERE'	4.1		III	Category B	
1332	METALDEHYDE	4.1		III	Category A	
1333	CERIUM slabs, ingots or rods	4.1		II	Category A	SG15 SG17
1334	NAPHTHALENE, CRUDE or NAPHTHALENE, REFINED	4.1		III	Category A SW23	
1336	NITROGUANIDINE (PICRITE), WETTED with not less than 20% water, by mass	4.1		I	Category E	SG7 SG30
1337	NITROSTARCH, WETTED with not less than 20% water, by mass	4.1		I	Category D	SG7 SG30
1338	PHOSPHORUS, AMORPHOUS	4.1		III	Category A	SG17
1339	PHOSPHORUS HEPTASULPHIDE free from yellow or white phosphorus	4.1		II	Category B	SG17
1340	PHOSPHORUS PENTASULPHIDE free from yellow or white phosphorus	4.3		II	Category D	
1341	PHOSPHORUS SESQUISULPHIDE free from yellow or white phosphorus	4.1		II	Category B	SG17
1343	PHOSPHORUS TRISULPHIDE free from yellow or white phosphorus	4.1		II	Category B	SG17
1344	TRINITROPHENOL (PICRIC ACID), WETTED with not less than 30% water, by mass	4.1		I	Category E	SG7 SG30
1345	RUBBER SCRAP powdered or granulated, not exceeding 840 microns and rubber content exceeding 45% or RUBBER SHODDY powdered or granulated, not exceeding 840 microns and rubber content exceeding 45%	4.1		II	Category A	
1346	SILICON POWDER, AMORPHOUS	4.1		III	Category A	SG17
1347	SILVER PICRATE, WETTED with not less than 30% water, by mass	4.1		I	Category D	SG7 SG30
1348	SODIUM DINITRO-o-CRESOLATE, WETTED with not less than 15% water, by mass	4.1	6.1P	I	Category E	SG7 SG30
1349	SODIUM PICRAMATE, WETTED with not less than 20% water, by mass	4.1		I	Category E	SG7 SG30

UN Number	PROPER SHIPPING NAME (Note: When there is more than one packing group or PSN the UN No. has been annotated with a, b, c)	Class or division	Subsidiary risk(s)	Packing Group	Stowage and Handling	Segregation
1350	SULPHUR	4.1		III	Category A SW1 SW23	SG17
1352	TITANIUM POWDER, WETTED with not less than 25% water (a visible excess of water must be present) (a) mechanically produced, particle size less than 53 microns; (b) chemically produced, particle size less than 840 microns	4.1		II	Category E	SG17
1353	FIBRES or FABRICS IMPREGNATED WITH WEAKLY NITRATED NITROCELLULOSE, N.O.S.	4.1		III	Category D	
1354	TRINITROBENZENE, WETTED with not less than 30% water, by mass	4.1		I	Category E	SG7 SG30
1355	TRINITROBENZOIC ACID, WETTED with not less than 30% water, by mass	4.1		I	Category E	SG7 SG30
1356	TRINITROTOLUENE (TNT), WETTED with not less than 30% water, by mass	4.1		I	Category E	SG7 SG30
1357	UREA NITRATE, WETTED with not less than 20% water, by mass	4.1		I	Category E	SG7 SG30
1358	ZIRCONIUM POWDER, WETTED with not less than 25% water (a visible excess of water must be present) (a) mechanically produced, particle size less than 53 microns; (b) chemically produced, particle size less than 840 microns	4.1		II	Category E	SG17
1360	CALCIUM PHOSPHIDE	4.3	6.1	I	Category E SW2 SW5	SG35
1361	CARBON animal or vegetable origin	4.2		II	Category A SW1 H2	
1361	CARBON animal or vegetable origin	4.2		III	Category A SW1 H2	
1362	CARBON, ACTIVATED	4.2		III	Category A SW1 H2	
1363	COPRA	4.2		III	Category A SW1 SW9 H1	
1364	COTTON WASTE, OILY	4.2		III	Category A	SG41
1365	COTTON, WET	4.2		III	Category A	
1369	p-NITROSODIMETHYLANILINE	4.2		II	Category D	SG29
1372	FIBRES ANIMAL or FIBRES VEGETABLE burnt, wet or damp	4.2		III	Category A	
1373	FIBRES or FABRICS, ANIMAL or VEGETABLE or SYNTHETIC N.O.S. with oil	4.2		III	Category A	
1374	FISHMEAL, UNSTABILIZED (FISHSCRAP, UNSTABILIZED) High hazard. Unrestricted moisture content, Unrestricted fat content in excess of 12%, by mass; unrestricted fat content in excess of 15%, by mass, in the case of antioxidant treated fishmeal or fishscrap	4.2		II	Category B SW1 SW24	SG65
1374	FISHMEAL, UNSTABILIZED (FISHSCRAP, UNSTABILIZED) High hazard Unrestricted moisture content, Unrestricted fat content in excess of 12%, by mass; unrestricted fat content in excess of 15%, by mass, in the case of antioxidant treated fishmeal or fishscrap	4.2		III	Category A SW1 SW24	
1376	IRON OXIDE, SPENT or IRON SPONGE, SPENT obtained from coal gas purification	4.2		III	Category E	

UN Number	PROPER SHIPPING NAME (Note: When there is more than one packing group or PSN the UN No. has been annotated with a, b, c)	Class or division	Subsidiary risk(s)	Packing Group	Stowage and Handling	Segregation
1378	METAL CATALYST, WETTED with a visible excess of liquid	4.2		II	Category C	
1379	PAPER, UNSATURATED OIL TREATED incompletely dried (including carbon paper)	4.2		III	Category A	
1380	PENTABORANE	4.2	6.1	I	Category D	
1381	PHOSPHORUS, WHITE or YELLOW, DRY or UNDER WATER or IN SOLUTION	4.2	6.1P	I	Category E	
1382	POTASSIUM SULPHIDE, ANHYDROUS or POTASSIUM SULPHIDE with less than 30% water of crystall	4.2		II	Category A	SG35
1383	PYROPHORIC METAL, N.O.S. or PYROPHORIC ALLOY, N.O.S.	4.2		I	Category D	
1384	SODIUM DITHIONITE (SODIUM HYDROSULPHITE)	4.2		II	Category E H1	
1385	SODIUM SULPHIDE, ANHYDROUS or SODIUM SULPHIDE with less than 30% water of crystallizatio	4.2		II	Category A	SG35
1386	SEED CAKE, containing vegetable oil (a) mechanically expelled seeds, containing more tha	4.2		III	Category E SW1 SW25 H1	
1386	SEED CAKE, containing vegetable oil (b) solvent extractions and expelled seeds, containi	4.2		III	Category A SW1 SW25 H1	
1387	WOOL WASTE, WET	4.2		III	Category A	
1389	ALKALI METAL AMALGAM, LIQUID	4.3		I	Category D	SG35
1390	ALKALI METAL AMIDE	4.3		II	Category E SW2	SG35
1391	ALKALI METAL DISPERSION or ALKALINE EARTH METAL DISPERSION	4.3		I	Category D	SG35
1392	ALKALINE EARTH METAL AMALGAM, LIQUID	4.3		I	Category D	SG35
1393	ALKALINE EARTH METAL ALLOY, N.O.S.	4.3		II	Category E	SG35
1394	ALUMINIUM CARBIDE	4.3		II	Category A	SG35
1395	ALUMINIUM FERROSILICON POWDER	4.3	6.1	II	Category A SW2 SW5 H1	SG32 SG35 SG36
1396	ALUMINIUM POWDER, UNCOATED	4.3		II	Category A	SG32 SG35 SG36
1396	ALUMINIUM POWDER, UNCOATED	4.3		III	Category A	SG32 SG35 SG36
1397	ALUMINIUM PHOSPHIDE	4.3	6.1	I	Category E SW2 SW5	SG35
1398	ALUMINIUM SILICON POWDER, UNCOATED	4.3		III	Category A SW2 SW5 H1	SG32 SG35 SG36
1400	BARIUM	4.3		II	Category E	SG35
1401	CALCIUM	4.3		II	Category E	SG35
1402	CALCIUM CARBIDE	4.3		I	Category B	SG35
1402	CALCIUM CARBIDE	4.3		II	Category B	SG35
1403	CALCIUM CYANAMIDE with more than 0.1% calcium carbide	4.3		III	Category A	SG35
1404	CALCIUM HYDRIDE	4.3		I	Category E	SG35
1405	CALCIUM SILICIDE	4.3		II	Category B SW5 H1	SG35
1405	CALCIUM SILICIDE	4.3		III	Category B SW5 H1	SG35

UN Number	PROPER SHIPPING NAME (Note: When there is more than one packing group or PSN the UN No. has been annotated with a, b, c)	Class or division	Subsidiary risk(s)	Packing Group	Stowage and Handling	Segregation
1407	CAESIUM	4.3		I	Category D	SG35
1408	FERROSILICON with 30% or more but less than 90% silicon	4.3	6.1	III	Category A SW2 SW5 H1	SG35 SG36
1409	METAL HYDRIDES, WATER-REACTIVE, N.O.S.	4.3		I	Category D	SG35
1409	METAL HYDRIDES, WATER-REACTIVE, N.O.S.	4.3		II	Category D	SG35
1410	LITHIUM ALUMINIUM HYDRIDE	4.3		I	Category E	SG35
1411	LITHIUM ALUMINIUM HYDRIDE, ETHEREAL	4.3	3	I	Category D SW2	
1413	LITHIUM BOROHYDRIDE	4.3		I	Category E	SG35
1414	LITHIUM HYDRIDE	4.3		I	Category E	SG35
1415	LITHIUM	4.3		I	Category E	SG35
1417	LITHIUM SILICON	4.3		II	Category A SW5 H1	
1418	MAGNESIUM POWDER or MAGNESIUM ALLOYS POWDER	4.3	4.2	I	Category A	SG32 SG35
1418	MAGNESIUM POWDER or MAGNESIUM ALLOYS POWDER	4.3	4.2	II	Category A	SG32 SG35
1418	MAGNESIUM POWDER or MAGNESIUM ALLOYS POWDER	4.3	4.2	III	Category A	SG32 SG35
1419	MAGNESIUM ALUMINIUM PHOSPHIDE	4.3	6.1	I	Category E SW2 SW5	SG35
1420	POTASSIUM METAL ALLOYS, LIQUID	4.3		I	Category D	SG35
1421	ALKALI METAL ALLOY, LIQUID, N.O.S.	4.3		I	Category D	SG35
1422	POTASSIUM SODIUM ALLOYS, LIQUID	4.3		I	Category D	SG35
1423	RUBIDIUM	4.3		I	Category D	SG35
1426	SODIUM BOROHYDRIDE	4.3		I	Category E	SG35
1427	SODIUM HYDRIDE	4.3		I	Category E	SG35
1428	SODIUM	4.3		I	Category D	SG35
1431	SODIUM METHYLATE	4.2	8	II	Category B	
1432	SODIUM PHOSPHIDE	4.3	6.1	I	Category E SW2 SW5	SG35
1433	STANNIC PHOSPHIDE	4.3	6.1	I	Category E SW2 SW5	SG35
1435	ZINC ASHES	4.3		III	Category A	
1436	ZINC POWDER or ZINC DUST	4.3	4.2	I	Category A	SG35 SG36
1436	ZINC POWDER or ZINC DUST	4.3	4.2	II	Category A	SG35 SG36
1436	ZINC POWDER or ZINC DUST	4.3	4.2	III	Category A	SG35 SG36
1437	ZIRCONIUM HYDRIDE	4.1		II	Category E	
1438	ALUMINIUM NITRATE	5.1		III	Category A	
1439	AMMONIUM DICHROMATE	5.1		II	Category A	SG35
1442	AMMONIUM PERCHLORATE	5.1		II	Category E	SG49 SG60
1444	AMMONIUM PERSULPHATE	5.1		III	Category A	



UN Number	PROPER SHIPPING NAME (Note: When there is more than one packing group or PSN the UN No. has been annotated with a, b, c)	Class or division	Subsidiary risk(s)	Packing Group	Stowage and Handling	Segregation
1445	BARIUM CHLORATE, SOLID	5.1	6.1	II	Category A	SG38 SG49
1446	BARIUM NITRATE	5.1	6.1	II	Category A	
1447	BARIUM PERCHLORATE, SOLID	5.1	6.1	II	Category A	SG38 SG49
1448	BARIUM PERMANGANATE	5.1	6.1	II	Category D	SG38 SG49 SG60
1449	BARIUM PEROXIDE	5.1	6.1	II	Category A H1	SG16 SG35 SG59
1450	BROMATES, INORGANIC, N.O.S.	5.1		II	Category A	SG38 SG49
1451	CAESIUM NITRATE	5.1		III	Category A	
1452	CALCIUM CHLORATE	5.1		II	Category A	SG38 SG49
1453	CALCIUM CHLORITE	5.1		II	Category A	SG38 SG49
1454	CALCIUM NITRATE	5.1		III	Category A SW23	
1455	CALCIUM PERCHLORATE	5.1		II	Category A	SG38 SG49
1456	CALCIUM PERMANGANATE	5.1		II	Category D	SG38 SG49 SG60
1457	CALCIUM PEROXIDE	5.1		II	Category A H1	SG16 SG35 SG59
1458	CHLORATE AND BORATE MIXTURE	5.1		II	Category A	SG38 SG49
1458	CHLORATE AND BORATE MIXTURE	5.1		III	Category A	SG38 SG49
1459	CHLORATE AND MAGNESIUM CHLORIDE MIXTURE, SOLID	5.1		II	Category A	SG38 SG49
1459	CHLORATE AND MAGNESIUM CHLORIDE MIXTURE, SOLID	5.1		III	Category A	SG38 SG49
1461	CHLORATES, INORGANIC, N.O.S.	5.1		II	Category A	SG38 SG49
1462	CHLORITES, INORGANIC, N.O.S.	5.1		II	Category A	SG38 SG49
1463	CHROMIUM TRIOXIDE, ANHYDROUS	5.1	6.1/8	II	Category A	SG6 SG16 SG19
1465	DIDYMIUM NITRATE	5.1		III	Category A	
1466	FERRIC NITRATE	5.1		III	Category A	
1467	GUANIDINE NITRATE	5.1		III	Category A	SG45
1469	LEAD NITRATE	5.1	6.1P	II	Category A	
1470	LEAD PERCHLORATE, SOLID	5.1	6.1P	II	Category A	SG38 SG49
1471	LITHIUM HYPOCHLORITE, DRY or LITHIUM HYPOCHLORITE MIXTURE	5.1		II	Category A SW1 SW8	SG35 SG38 SG49 SG53 SG60

UN Number	PROPER SHIPPING NAME (Note: When there is more than one packing group or PSN the UN No. has been annotated with a, b, c)	Class or division	Subsidiary risk(s)	Packing Group	Stowage and Handling	Segregation
1471	LITHIUM HYPOCHLORITE, DRY or LITHIUM HYPOCHLORITE MIXTURE	5.1		III	Category A SW1 SW8	SG35 SG38 SG49 SG53 SG60
1472	LITHIUM PEROXIDE	5.1		II	Category A H1	SG16 SG35 SG59
1473	MAGNESIUM BROMATE	5.1		II	Category A	SG38 SG49
1474	MAGNESIUM NITRATE	5.1		III	Category A SW23	
1475	MAGNESIUM PERCHLORATE	5.1		II	Category A	SG38 SG49
1476	MAGNESIUM PEROXIDE	5.1		II	Category A H1	SG16 SG35 SG59
1477	NITRATES, INORGANIC, N.O.S.	5.1		II	Category A	SG38 SG49
1477	NITRATES, INORGANIC, N.O.S.	5.1		III	Category A	SG38 SG49
1479	OXIDIZING SOLID, N.O.S.	5.1		I	Category D	SG38 SG49 SG60 SG61
1479	OXIDIZING SOLID, N.O.S.	5.1		II	Category B	SG38 SG49 SG60 SG61
1479	OXIDIZING SOLID, N.O.S.	5.1		III	Category B	SG38 SG49 SG60 SG61
1481	PERCHLORATES, INORGANIC, N.O.S.	5.1		II	Category A	SG38 SG49
1481	PERCHLORATES, INORGANIC, N.O.S.	5.1		III	Category A	SG38 SG49
1482	PERMANGANATES, INORGANIC, N.O.S.	5.1		II	Category D	SG38 SG49 SG60
1482	PERMANGANATES, INORGANIC, N.O.S.	5.1		III	Category D	SG38 SG49 SG60
1483	PEROXIDES, INORGANIC, N.O.S.	5.1		II	Category A H1	SG16 SG35 SG59
1483	PEROXIDES, INORGANIC, N.O.S.	5.1		III	Category A H1	SG16 SG35 SG59
1484	POTASSIUM BROMATE	5.1		II	Category A	SG38 SG49
1485	POTASSIUM CHLORATE	5.1		II	Category A	SG38 SG49
1486	POTASSIUM NITRATE	5.1		III	Category A SW23	
1487	POTASSIUM NITRATE AND SODIUM NITRITE MIXTURE	5.1		II	Category A	SG38 SG49
1488	POTASSIUM NITRITE	5.1		II	Category A	SG38 SG49
1489	POTASSIUM PERCHLORATE	5.1		II	Category A	SG38 SG49

UN Number	PROPER SHIPPING NAME (Note: When there is more than one packing group or PSN the UN No. has been annotated with a, b, c)	Class or division	Subsidiary risk(s)	Packing Group	Stowage and Handling	Segregation
1490	POTASSIUM PERMANGANATE	5.1		II	Category D	SG38 SG49 SG60
1491	POTASSIUM PEROXIDE	5.1		I	Category B H1	SG16 SG35 SG59
1492	POTASSIUM PERSULPHATE	5.1		III	Category A	SG39 SG49
1493	SILVER NITRATE	5.1		II	Category A	
1494	SODIUM BROMATE	5.1		II	Category A	SG38 SG49
1495	SODIUM CHLORATE	5.1		II	Category A	SG38 SG49
1496	SODIUM CHLORITE	5.1		II	Category A	SG38 SG49
1498	SODIUM NITRATE	5.1		III	Category A SW23	
1499	SODIUM NITRATE AND POTASSIUM NITRATE MIXTURE	5.1		III	Category A SW23	
1500	SODIUM NITRITE	5.1	6.1	III	Category A	SG38 SG49
1502	SODIUM PERCHLORATE	5.1		II	Category A	SG38 SG49
1503	SODIUM PERMANGANATE	5.1		II	Category D	SG38 SG49 SG60
1504	SODIUM PEROXIDE	5.1		I	Category B H1	SG16 SG35 SG59
1505	SODIUM PERSULPHATE	5.1		III	Category A	SG39 SG49
1506	STRONTIUM CHLORATE	5.1		II	Category A	SG38 SG49
1507	STRONTIUM NITRATE	5.1		III	Category A	
1508	STRONTIUM PERCHLORATE	5.1		II	Category A	SG38 SG49
1509	STRONTIUM PEROXIDE	5.1		II	Category A H1	SG16 SG35 SG59
1510	TETRANITROMETHANE	6.1	5.1	I	Category D SW2	SG16
1511	UREA HYDROGEN PEROXIDE	5.1	8	III	Category A H1	
1512	ZINC AMMONIUM NITRITE	5.1			Category	
1513	ZINC CHLORATE	5.1		II	Category A	SG38 SG49
1514	ZINC NITRATE	5.1		II	Category A	
1515	ZINC PERMANGANATE	5.1		II	Category D	SG38 SG49 SG60
1516	ZINC PEROXIDE	5.1		II	Category A H1	SG16 SG35 SG59
1517	ZIRCONIUM PICRAMATE, WETTED with not less than 20% water, by mass	4.1		I	Category D	SG7 SG30
1541	ACETONE CYANOHYDRIN, STABILIZED	6.1	P	I	Category D SW1 SW2	SG35 SG36



UN Number	PROPER SHIPPING NAME (Note: When there is more than one packing group or PSN the UN No. has been annotated with a, b, c)	Class or division	Subsidiary risk(s)	Packing Group	Stowage and Handling	Segregation
1544	ALKALOIDS, SOLID, N.O.S. or ALKALOIDS SALTS, SOLID, N.O.S.	6.1		I	Category A	
1544	ALKALOIDS, SOLID, N.O.S. or ALKALOIDS SALTS, SOLID, N.O.S.	6.1		II	Category A	
1544	ALKALOIDS, SOLID, N.O.S. or ALKALOIDS SALTS, SOLID, N.O.S.	6.1		III	Category A	
1545	ALLYL ISOTHIOCYANATE, STABILIZED	6.1	3	II	Category D SW2	
1546	AMMONIUM ARSENATE	6.1		II	Category A	SG36
1547	ANILINE	6.1		II	Category A SW2	SG35
1548	ANILINE HYDROCHLORIDE	6.1		III	Category A	
1549	ANTIMONY COMPOUND, INORGANIC, SOLID, N.O.S.	6.1		III	Category A	
1550	ANTIMONY LACTATE	6.1		III	Category A	
1551	ANTIMONY POTASSIUM TARTRATE	6.1		III	Category A	
1553	ARSENIC ACID, LIQUID	6.1		I	Category B	SG33
1554	ARSENIC ACID, SOLID	6.1		II	Category A	
1555	ARSENIC BROMIDE	6.1		II	Category A SW1 SW2 H2	
1556	ARSENIC COMPOUND, LIQUID, N.O.S. inorganic, including: Arsenates, n.o.s., Arsenites, n.o.s., and Arsenic sulphides, n.o.s.	6.1		I	Category B SW2	SG70
1556	ARSENIC COMPOUND, LIQUID, N.O.S. inorganic, including: Arsenates, n.o.s., Arsenites, n.o.s., and Arsenic sulphides, n.o.s.	6.1		II	Category B SW2	SG70
1556	ARSENIC COMPOUND, LIQUID, N.O.S. inorganic, including: Arsenates, n.o.s., Arsenites, n.o.s., and Arsenic sulphides, n.o.s.	6.1		III	Category B SW2	SG70
1557	ARSENIC COMPOUND, SOLID, N.O.S. inorganic, including: Arsenates, n.o.s.; Arsenites, n.o.s.; and Arsenic sulphides, n.o.s.	6.1		I	Category A	SG70
1557	ARSENIC COMPOUND, SOLID, N.O.S. inorganic, including: Arsenates, n.o.s.; Arsenites, n.o.s.; and Arsenic sulphides, n.o.s.	6.1		II	Category A	SG70
1557	ARSENIC COMPOUND, SOLID, N.O.S. inorganic, including: Arsenates, n.o.s.; Arsenites, n.o.s.; and Arsenic sulphides, n.o.s.	6.1		III	Category A	SG70
1558	ARSENIC	6.1		II	Category A	
1559	ARSENIC PENTOXIDE	6.1		II	Category A	
1560	ARSENIC TRICHLORIDE	6.1		I	Category B SW2	
1561	ARSENIC TRIOXIDE	6.1		II	Category A	
1562	ARSENICAL DUST	6.1		II	Category A	
1564	BARIUM COMPOUND, N.O.S.	6.1		II	Category A	
1564	BARIUM COMPOUND, N.O.S.	6.1		III	Category A	
1565	BARIUM CYANIDE	6.1	P	I	Category A SW2	SG35
1566	BERYLLIUM COMPOUND, N.O.S.	6.1		II	Category A	

UN Number	PROPER SHIPPING NAME (Note: When there is more than one packing group or PSN the UN No. has been annotated with a, b, c)	Class or division	Subsidiary risk(s)	Packing Group	Stowage and Handling	Segregation
1566	BERYLLIUM COMPOUND, N.O.S.	6.1		III	Category A	
1567	BERYLLIUM POWDER	6.1	4.1	II	Category A	
1569	BROMOACETONE	6.1	3P	II	Category D SW2	
1570	BRUCINE	6.1		I	Category A	
1571	BARIUM AZIDE, WETTED with not less than 50% water, by mass	4.1	6.1	I	Category D	SG7 SG30
1572	CACODYLIC ACID	6.1		II	Category E	SG35
1573	CALCIUM ARSENATE	6.1	P	II	Category A	
1574	CALCIUM ARSENATE AND CALCIUM ARSENITE MIXTURE, SOLID	6.1	P	II	Category A	
1575	CALCIUM CYANIDE	6.1	P	I	Category A SW2	SG35
1577	CHLORODINITROBENZENES, LIQUID	6.1	P	II	Category A	SG15
1578	CHLORONITROBENZENES, SOLID	6.1		II	Category A	
1579	4-CHLORO-o-TOLUIDINE HYDROCHLORIDE, SOLID	6.1		III	Category A	
1580	CHLOROPICRIN	6.1	P	I	Category D SW2	
1581	CHLOROPICRIN AND METHYL BROMIDE MIXTURE with more than 2% chloropicrin	2.3			Category D SW1 SW2	
1582	CHLOROPICRIN AND METHYL CHLORIDE MIXTURE	2.3			Category D SW1 SW2	
1583	CHLOROPICRIN MIXTURE, N.O.S.	6.1		I	Category C SW2	
1583	CHLOROPICRIN MIXTURE, N.O.S.	6.1		II	Category C SW2	
1583	CHLOROPICRIN MIXTURE, N.O.S.	6.1		III	Category C SW2	
1585	COPPER ACETOARSENITE	6.1	P	II	Category A	
1586	COPPER ARSENITE	6.1	P	II	Category A	
1587	COPPER CYANIDE	6.1	P	II	Category A	SG35
1588	CYANIDES, INORGANIC, SOLID, N.O.S.	6.1	P	I	Category A	SG35
1588	CYANIDES, INORGANIC, SOLID, N.O.S.	6.1	P	II	Category A	SG35
1588	CYANIDES, INORGANIC, SOLID, N.O.S.	6.1	P	III	Category A	SG35
1589	CYANOGEN CHLORIDE, STABILIZED	2.3	8P		Category D SW2	
1590	DICHLOROANILINES, LIQUID	6.1	P	II	Category A SW2	
1591	o-DICHLOROBENZENE	6.1		III	Category A	
1593	DICHLOROMETHANE	6.1		III	Category A	
1594	DIETHYL SULPHATE	6.1		II	Category C	
1595	DIMETHYL SULPHATE	6.1	8	I	Category D SW2	
1596	DINITROANILINES	6.1		II	Category A	SG15
1597	DINITROBENZENES, LIQUID	6.1		II	Category A	SG15
1597	DINITROBENZENES, LIQUID	6.1		III	Category A	SG15
1598	DINITRO-o-CRESOL	6.1	P	II	Category A	
1599	DINITROPHENOL SOLUTION	6.1	P	II	Category A	SG30

UN Number	PROPER SHIPPING NAME (Note: When there is more than one packing group or PSN the UN No. has been annotated with a, b, c)	Class or division	Subsidiary risk(s)	Packing Group	Stowage and Handling	Segregation
1599	DINITROPHENOL SOLUTION	6.1	P	III	Category A	SG30
1600	DINITROTOLUENES, MOLTEN	6.1		II	Category C	
1601	DISINFECTANT, SOLID, TOXIC, N.O.S.	6.1		I	Category A SW2	
1601	DISINFECTANT, SOLID, TOXIC, N.O.S.	6.1		II	Category A SW2	
1601	DISINFECTANT, SOLID, TOXIC, N.O.S.	6.1		III	Category A SW2	
1602	DYE, LIQUID, TOXIC, N.O.S. or DYE INTERMEDIATE, LIQUID, TOXIC, N.O.S.	6.1		I	Category A	
1602	DYE, LIQUID, TOXIC, N.O.S. or DYE INTERMEDIATE, LIQUID, TOXIC, N.O.S.	6.1		II	Category A	
1602	DYE, LIQUID, TOXIC, N.O.S. or DYE INTERMEDIATE, LIQUID, TOXIC, N.O.S.	6.1		III	Category A	
1603	ETHYL BROMOACETATE	6.1	3	II	Category D SW2	
1604	ETHYLENEDIAMINE	8	3	II	Category A SW2	SG35
1605	ETHYLENE DIBROMIDE	6.1		I	Category D SW2	
1606	FERRIC ARSENATE	6.1	P	II	Category A	
1607	FERRIC ARSENITE	6.1	P	II	Category A	
1608	FERROUS ARSENATE	6.1	P	II	Category A	
1611	HEXAETHYL TETRAPHOSPHATE	6.1	P	II	Category E SW2	
1612	HEXAETHYL TETRAPHOSPHATE AND COMPRESSED GAS MIXTURE	2.3			Category D SW2	
1613	HYDROCYANIC ACID, AQUEOUS SOLUTION (HYDROGEN CYANIDE, AQUEOUS SOLUTION) with not more th	6.1	P	I	Category D SW2	
1614	HYDROGEN CYANIDE, STABILIZED containing less than 3% water and absorbed in a porous iner	6.1	P	I	Category D SW1 SW2	
1616	LEAD ACETATE	6.1	P	III	Category A	
1617	LEAD ARSENATES	6.1	P	II	Category A	
1618	LEAD ARSENITES	6.1	P	II	Category A	
1620	LEAD CYANIDE	6.1	P	II	Category A	SG35
1621	LONDON PURPLE	6.1	P	II	Category A	
1622	MAGNESIUM ARSENATE	6.1	P	II	Category A	
1623	MERCURIC ARSENATE	6.1	P	II	Category A	
1624	MERCURIC CHLORIDE	6.1	P	II	Category A	
1625	MERCURIC NITRATE	6.1	P	II	Category A	
1626	MERCURIC POTASSIUM CYANIDE	6.1	P	I	Category A	SG35
1627	MERCUROUS NITRATE	6.1	P	II	Category A	
1629	MERCURY ACETATE	6.1	P	II	Category A	
1630	MERCURY AMMONIUM CHLORIDE	6.1	P	II	Category A	
1631	MERCURY BENZOATE	6.1	P	II	Category A	
1634	MERCURY BROMIDES	6.1	P	II	Category A	
1636	MERCURY CYANIDE	6.1	P	II	Category A	SG35

UN Number	PROPER SHIPPING NAME (Note: When there is more than one packing group or PSN the UN No. has been annotated with a, b, c)	Class or division	Subsidiary risk(s)	Packing Group	Stowage and Handling	Segregation
1637	MERCURY GLUCONATE	6.1	P	II	Category A	
1638	MERCURY IODIDE	6.1	P	II	Category A	
1639	MERCURY NUCLEATE	6.1	P	II	Category A	
1640	MERCURY OLEATE	6.1	P	II	Category A	
1641	MERCURY OXIDE	6.1	P	II	Category A	
1642	MERCURY OXYCYANIDE, DESENSITIZED	6.1	P	II	Category A	SG15 SG35
1643	MERCURY POTASSIUM IODIDE	6.1	P	II	Category A	
1644	MERCURY SALICYLATE	6.1	P	II	Category A	
1645	MERCURY SULPHATE	6.1	P	II	Category A	
1646	MERCURY THIOCYANATE	6.1	P	II	Category A	
1647	METHYL BROMIDE AND ETHYLENE DIBROMIDE MIXTURE, LIQUID	6.1	P	I	Category D SW2	
1648	ACETONITRILE	3		II	Category B SW2	
1649	MOTOR FUEL ANTI-KNOCK MIXTURE	6.1	P	I	Category D SW1 SW2	
1650	beta-NAPHTHYLAMINE, SOLID	6.1		II	Category A	
1651	NAPHTHYLTHIOUREA	6.1		II	Category A	
1652	NAPHTHYLUREA	6.1		II	Category A	
1653	NICKEL CYANIDE	6.1	P	II	Category A	SG35
1654	NICOTINE	6.1		II	Category A	
1655	NICOTINE COMPOUND, SOLID, N.O.S. or NICOTINE PREPARATION, SOLID, N.O.S.	6.1		I	Category B	
1655	NICOTINE COMPOUND, SOLID, N.O.S. or NICOTINE PREPARATION, SOLID, N.O.S.	6.1		II	Category A	
1655	NICOTINE COMPOUND, SOLID, N.O.S. or NICOTINE PREPARATION, SOLID, N.O.S.	6.1		III	Category A	
1656	NICOTINE HYDROCHLORIDE, LIQUID or SOLUTION	6.1		II	Category A	
1656	NICOTINE HYDROCHLORIDE, LIQUID or SOLUTION	6.1		III	Category A	
1657	NICOTINE SALICYLATE	6.1		II	Category A	
1658	NICOTINE SULPHATE SOLUTION	6.1		II	Category A	
1658	NICOTINE SULPHATE SOLUTION	6.1		III	Category A	
1659	NICOTINE TARTRATE	6.1		II	Category A	
1660	NITRIC OXIDE, COMPRESSED	2.3	5.1/8		Category D SW2	SG6 SG19
1661	NITROANILINES (o-, m-, p-)	6.1		II	Category A	
1662	NITROBENZENE	6.1		II	Category A SW2	
1663	NITROPHENOLS (o-, m-, p-)	6.1		III	Category A	
1664	NITROTOLUENES, LIQUID	6.1		II	Category A	
1665	NITROXYLENES, LIQUID	6.1		II	Category A	
1669	PENTACHLOROETHANE	6.1	P	II	Category A SW2	
1670	PERCHLOROMETHYL MERCAPTAN	6.1	P	I	Category D SW2	
1671	PHENOL, SOLID	6.1		II	Category A	

UN Number	PROPER SHIPPING NAME (Note: When there is more than one packing group or PSN the UN No. has been annotated with a, b, c)	Class or division	Subsidiary risk(s)	Packing Group	Stowage and Handling	Segregation
1672	PHENYL CARBYLAMINE CHLORIDE	6.1		I	Category D SW2	
1673	PHENYLENEDIAMINES (o-, m-, p-)	6.1		III	Category A	
1674	PHENYLMERCURIC ACETATE	6.1	P	II	Category A	
1677	POTASSIUM ARSENATE	6.1		II	Category A	
1678	POTASSIUM ARSENITE	6.1		II	Category A	
1679	POTASSIUM CUPROCYANIDE	6.1	P	II	Category A	SG35
1680	POTASSIUM CYANIDE, SOLID	6.1	P	I	Category B	SG35
1683	SILVER ARSENITE	6.1	P	II	Category A	
1684	SILVER CYANIDE	6.1	P	II	Category A SW2	SG35
1685	SODIUM ARSENATE	6.1		II	Category A	
1686	SODIUM ARSENITE, AQUEOUS SOLUTION	6.1		II	Category A	
1686	SODIUM ARSENITE, AQUEOUS SOLUTION	6.1		III	Category A	
1687	SODIUM AZIDE	6.1		II	Category A	SG15 SG30 SG35
1688	SODIUM CACODYLATE	6.1		II	Category A	SG35
1689	SODIUM CYANIDE, SOLID	6.1	P	I	Category B	SG35
1690	SODIUM FLUORIDE, SOLID	6.1		III	Category A	SG35
1691	STRONTIUM ARSENITE	6.1		II	Category A	
1692	STRYCHNINE or STRYCHNINE SALTS	6.1	P	I	Category A	
1693	TEAR GAS SUBSTANCE, LIQUID, N.O.S.	6.1		I	Category D SW2	
1693	TEAR GAS SUBSTANCE, LIQUID, N.O.S.	6.1		II	Category D SW2	
1694	BROMOBENZYL CYANIDES, LIQUID	6.1		I	Category D SW1 SW2 H2	SG35
1695	CHLOROACETONE, STABILIZED	6.1	"3/8P	I	Category D SW2	SG5 SG8
1697	CHLOROACETOPHENONE, SOLID	6.1		II	Category D SW1 SW2 H2	
1698	DIPHENYLAMINE CHLOROARSINE	6.1	P	I	Category D SW2	
1699	DIPHENYLCHLOROARSINE, LIQUID	6.1	P	I	Category D SW2	
1700	TEAR GAS CANDLES	6.1	4.1	II	Category D SW2	
1701	XYLYL BROMIDE, LIQUID	6.1		II	Category D SW2	
1702	1,1,2,2-TETRACHLOROETHANE	6.1	P	II	Category A SW2	
1704	TETRAETHYL DITHIOPYROPHOSPHATE	6.1	P	II	Category D SW2	
1707	THALLIUM COMPOUND, N.O.S.	6.1	P	II	Category A	
1708	TOLUIDINES, LIQUID	6.1		II	Category A	
1709	2,4-TOLUYLENEDIAMINE, SOLID	6.1		III	Category A	
1710	TRICHLOROETHYLENE	6.1		III	Category A SW2	

UN Number	PROPER SHIPPING NAME (Note: When there is more than one packing group or PSN the UN No. has been annotated with a, b, c)	Class or division	Subsidiary risk(s)	Packing Group	Stowage and Handling	Segregation
1711	XYLIDINES, LIQUID	6.1		II	Category A	
1712	ZINC ARSENATE or ZINC ARSENITE or ZINC ARSENATE, ZINC ARSENITE MIXTURE	6.1		II	Category A	
1713	ZINC CYANIDE	6.1	P	I	Category A	SG35
1714	ZINC PHOSPHIDE	4.3	6.1	I	Category E SW2 SW5	SG35
1715	ACETIC ANHYDRIDE	8	3	II	Category A SW2	
1716	ACETYL BROMIDE	8		II	Category C SW2	
1717	ACETYL CHLORIDE	3	8	II	Category B SW2	
1718	BUTYL ACID PHOSPHATE	8		III	Category A	
1719	CAUSTIC ALKALI LIQUID, N.O.S.	8		II	Category A	SG22 SG35
1719	CAUSTIC ALKALI LIQUID, N.O.S.	8		III	Category A	SG22 SG35
1722	ALLYL CHLOROFORMATE	6.1	"3/8	I	Category D SW2	SG5 SG8
1723	ALLYL IODIDE	3	8	II	Category B SW2	
1724	ALLYLTRICHLOROSILANE, STABILIZED	8	3	II	Category C SW2	
1725	ALUMINIUM BROMIDE, ANHYDROUS	8		II	Category A SW2	
1726	ALUMINIUM CHLORIDE, ANHYDROUS	8		II	Category A SW2	
1727	AMMONIUM HYDROGEN DIFLUORIDE, SOLID	8		II	Category A SW1 SW2	SG35
1728	AMYLTRICHLOROSILANE	8		II	Category C SW2	
1729	ANISOYL CHLORIDE	8		II	Category C SW2	
1730	ANTIMONY PENTACHLORIDE, LIQUID	8		II	Category C SW2	
1731	ANTIMONY PENTACHLORIDE SOLUTION	8		II	Category C SW2	
1731	ANTIMONY PENTACHLORIDE SOLUTION	8		III	Category C SW2	
1732	ANTIMONY PENTAFLUORIDE	8	6.1	II	Category D SW2	SG6 SG8 SG10 SG12
1733	ANTIMONY TRICHLORIDE	8		II	Category C SW2	
1736	BENZOYL CHLORIDE	8		II	Category C SW2	
1737	BENZYL BROMIDE	6.1		II	Category D SW2 H1	
1738	BENZYL CHLORIDE	6.1	8	II	Category D SW2 H1	
1739	BENZYL CHLOROFORMATE	8	P	I	Category D SW2	



UN Number	PROPER SHIPPING NAME (Note: When there is more than one packing group or PSN the UN No. has been annotated with a, b, c)	Class or division	Subsidiary risk(s)	Packing Group	Stowage and Handling	Segregation
1740	HYDROGEN DIFLUORIDES, SOLID, N.O.S.	8		II	Category A SW1 SW2	SG35
1740	HYDROGEN DIFLUORIDES, SOLID, N.O.S.	8		III	Category A SW1 SW2	SG35
1741	BORON TRICHLORIDE	2.3	8		Category D SW1 SW2	
1742	BORON TRIFLUORIDE ACETIC ACID COMPLEX, LIQUID	8		II	Category A	
1743	BORON TRIFLUORIDE PROPIONIC ACID COMPLEX, LIQUID	8		II	Category A	
1744	BROMINE or BROMINE SOLUTION	8	6.1	I	Category D SW1 SW2 H2	SG6 SG16 SG17 SG19
1745	BROMINE PENTAFLUORIDE	5.1	6.1/8	I	Category D SW1 SW2	SG6 SG16 SG19
1746	BROMINE TRIFLUORIDE	5.1	6.1/8	I	Category D SW1 SW2	SG6 SG16 SG19
1747	BUTYLTRICHLOROSILANE	8	3	II	Category C SW2	
1748	CALCIUM HYPOCHLORITE, DRY or CALCIUM HYPOCHLORITE MIXTURE, DRY with more than 39% available chlorine (8.8% available oxygen)	5.1		II	Category D SW1 SW11	SG35 SG38 SG49 SG53 SG60
1748	CALCIUM HYPOCHLORITE, DRY or CALCIUM HYPOCHLORITE MIXTURE, DRY with more than 39% available chlorine (8.8% available oxygen)	5.1		III	Category D SW1 SW11	SG35 SG38 SG49 SG53 SG60
1749	CHLORINE TRIFLUORIDE	2.3	5.1/8		Category D SW2	SG6 SG19
1750	CHLOROACETIC ACID SOLUTION	6.1	8	II	Category C SW2	
1751	CHLOROACETIC ACID, SOLID	6.1	8	II	Category C SW2	
1752	CHLOROACETYL CHLORIDE	6.1	8	I	Category D SW2	
1753	CHLOROPHENYLTRICHLOROSILANE	8	P	II	Category C SW2	
1754	CHLOROSULPHONIC ACID (with or without sulphur trioxide)	8		I	Category C SW2	
1755	CHROMIC ACID SOLUTION	8		II	Category C SW2	SG6 SG8 SG10 SG12
1755	CHROMIC ACID SOLUTION	8		III	Category C SW2	SG6 SG8 SG10 SG12
1756	CHROMIC FLUORIDE, SOLID	8		II	Category A	SG35
1757	CHROMIC FLUORIDE SOLUTION	8		II	Category A	
1757	CHROMIC FLUORIDE SOLUTION	8		III	Category A	
1758	CHROMIUM OXYCHLORIDE	8		I	Category C SW2	SG6 SG16 SG17 SG19

UN Number	PROPER SHIPPING NAME (Note: When there is more than one packing group or PSN the UN No. has been annotated with a, b, c)	Class or division	Subsidiary risk(s)	Packing Group	Stowage and Handling	Segregation
1759	CORROSIVE SOLID, N.O.S.	8		I	Category B	
1759	CORROSIVE SOLID, N.O.S.	8		II	Category A	
1759	CORROSIVE SOLID, N.O.S.	8		III	Category A	
1760	CORROSIVE LIQUID, N.O.S.	8		I	Category B SW2	
1760	CORROSIVE LIQUID, N.O.S.	8		II	Category B SW2	
1760	CORROSIVE LIQUID, N.O.S.	8		III	Category A SW2	
1761	CUPRIETHYLENEDIAMINE SOLUTION	8	6.1 P	II	Category A	
1761	CUPRIETHYLENEDIAMINE SOLUTION	8	6.1 P	III	Category A	
1762	CYCLOHEXENYLTRICHLOROSILANE	8		II	Category C SW2	
1763	CYCLOHEXYLTRICHLOROSILANE	8		II	Category C SW2	
1764	DICHLOROACETIC ACID	8		II	Category A	
1765	DICHLOROACETYL CHLORIDE	8		II	Category D SW2	
1766	DICHLOROPHENYLTRICHLOROSILANE	8	P	II	Category C SW2	
1767	DIETHYLDICHLOROSILANE	8	3	II	Category C SW2	
1768	DIFLUOROPHOSPHORIC ACID, ANHYDROUS	8		II	Category A SW2	
1769	DIPHENYLDICHLOROSILANE	8		II	Category C SW2	
1770	DIPHENYLMETHYL BROMIDE	8		II	Category D SW2	
1771	DODECYLTRICHLOROSILANE	8		II	Category C SW2	
1773	FERRIC CHLORIDE, ANHYDROUS	8		III	Category A	
1774	FIRE EXTINGUISHER CHARGES corrosive liquid	8		II	Category A	
1775	FLUOROBORIC ACID	8		II	Category A	
1776	FLUOROPHOSPHORIC ACID, ANHYDROUS	8		II	Category A	
1777	FLUOROSULPHONIC ACID	8		I	Category D SW2	
1778	FLUOROSILICIC ACID	8		II	Category A	
1779	FORMIC ACID with more than 85% acid, by mass	8	3	II	Category A SW2	
1780	FUMARYL CHLORIDE	8		II	Category C SW2	
1781	HEXADECYLTRICHLOROSILANE	8		II	Category C SW2	
1782	HEXAFLUOROPHOSPHORIC ACID	8		II	Category A	
1783	HEXAMETHYLENEDIAMINE SOLUTION	8		II	Category A	
1783	HEXAMETHYLENEDIAMINE SOLUTION	8		III	Category A	
1784	HEXYLTRICHLOROSILANE	8		II	Category C SW2	
1786	HYDROFLUORIC ACID AND SULPHURIC ACID MIXTURE	8	6.1	I	Category D SW2	
1787	HYDRIODIC ACID	8		II	Category C	



UN Number	PROPER SHIPPING NAME (Note: When there is more than one packing group or PSN the UN No. has been annotated with a, b, c)	Class or division	Subsidiary risk(s)	Packing Group	Stowage and Handling	Segregation
1787	HYDRIODIC ACID	8		III	Category C	
1788	HYDROBROMIC ACID	8		II	Category C	
1788	HYDROBROMIC ACID	8		III	Category C	
1789	HYDROCHLORIC ACID	8		II	Category C	
1789	HYDROCHLORIC ACID	8		III	Category C	
1790	HYDROFLUORIC ACID solution, with more than 60% hydrogen fluoride	8	6.1	I	Category D SW1 SW2 H2	
1790	HYDROFLUORIC ACID solution, with not more than 60% hydrogen fluoride	8	6.1	II	Category D SW1 SW2 H2	
1791	HYPOCHLORITE SOLUTION	8		II	Category B	SG20
1791	HYPOCHLORITE SOLUTION	8		III	Category B	SG20
1792	IODINE MONOCHLORIDE	8		II	Category D SW2	SG6 SG16 SG17 SG19
1793	ISOPROPYL ACID PHOSPHATE	8		III	Category A	
1794	LEAD SULPHATE with more than 3% free acid	8		II	Category A	
1796	NITRATING ACID MIXTURE with more than 50% nitric acid	8	5.1	I	Category D SW2	SG16
1796	NITRATING ACID MIXTURE with not more than 50% nitric acid	8		II	Category D SW2	
1798	NITROHYDROCHLORIC ACID	8		I	Category D SW2	SG6 SG16 SG17 SG19
1799	NONYLTRICHLOROSILANE	8		II	Category C SW2	
1800	OCTADECYLTRICHLOROSILANE	8		II	Category C SW2	
1801	OCTYLTRICHLOROSILANE	8		II	Category C SW2	
1802	PERCHLORIC ACID with not more than 50% acid, by mass	8	5.1	II	Category C	SG16
1803	PHENOLSULPHONIC ACID, LIQUID	8		II	Category C SW15	
1804	PHENYLTRICHLOROSILANE	8		II	Category C SW2	
1805	PHOSPHORIC ACID SOLUTION	8		III	Category A	
1806	PHOSPHORUS PENTACHLORIDE	8		II	Category C SW2	SG6 SG8 SG10 SG12
1807	PHOSPHORUS PENTOXIDE	8		II	Category A	
1808	PHOSPHORUS TRIBROMIDE	8		II	Category C SW2	
1809	PHOSPHORUS TRICHLORIDE	6.1	8	I	Category D SW2	
1810	PHOSPHORUS OXYCHLORIDE	6.1	8	I	Category D SW2	
1811	POTASSIUM HYDROGEN DIFLUORIDE, SOLID	8	6.1	II	Category A SW1 SW2	SG35
1812	POTASSIUM FLUORIDE, SOLID	6.1		III	Category A	SG35
1813	POTASSIUM HYDROXIDE, SOLID	8		II	Category A	SG35

UN Number	PROPER SHIPPING NAME (Note: When there is more than one packing group or PSN the UN No. has been annotated with a, b, c)	Class or division	Subsidiary risk(s)	Packing Group	Stowage and Handling	Segregation
1814	POTASSIUM HYDROXIDE SOLUTION	8		II	Category A	SG35
1814	POTASSIUM HYDROXIDE SOLUTION	8		III	Category A	SG35
1815	PROPIONYL CHLORIDE	3	8	II	Category B SW2	
1816	PROPYLTRICHLOROSILANE	8	3	II	Category C SW2	
1817	PYROSULPHURYL CHLORIDE	8		II	Category C SW2	
1818	SILICON TETRACHLORIDE	8		II	Category C SW2	SG72
1819	SODIUM ALUMINATE SOLUTION	8		II	Category A	SG35
1819	SODIUM ALUMINATE SOLUTION	8		III	Category A	SG35
1823	SODIUM HYDROXIDE, SOLID	8		II	Category A	SG35
1824	SODIUM HYDROXIDE SOLUTION	8		II	Category A	SG35
1824	SODIUM HYDROXIDE SOLUTION	8		III	Category A	SG35
1825	SODIUM MONOXIDE	8		II	Category A	SG35
1826	NITRATING ACID MIXTURE, SPENT with more than 50% nitric acid	8	5.1	I	Category D SW2	SG16
1826	NITRATING ACID MIXTURE, SPENT with not more than 50% nitric acid	8		II	Category D SW2	
1827	STANNIC CHLORIDE, ANHYDROUS	8		II	Category C	
1828	SULPHUR CHLORIDES	8		I	Category C SW2	
1829	SULPHUR TRIOXIDE, STABILIZED	8		I	Category C SW2	
1830	SULPHURIC ACID with more than 51% acid	8		II	Category C SW15	
1831	SULPHURIC ACID, FUMING	8	6.1	I	Category C SW2 SW15	
1832	SULPHURIC ACID, SPENT	8		II	Category C SW15	
1833	SULPHUROUS ACID	8		II	Category B SW2	
1834	SULPHURYL CHLORIDE	6.1	8	I	Category D SW2	
1835	TETRAMETHYLAMMONIUM HYDROXIDE SOLUTION	8		II	Category A	SG35
1835	TETRAMETHYLAMMONIUM HYDROXIDE SOLUTION	8		III	Category A	SG35
1836	THIONYL CHLORIDE	8		I	Category C SW2	
1837	THIOPHOSPHORYL CHLORIDE	8		II	Category C SW2	
1838	TITANIUM TETRACHLORIDE	6.1	8	I	Category D SW2	
1839	TRICHLOROACETIC ACID, SOLID	8		II	Category A	
1840	ZINC CHLORIDE SOLUTION	8		III	Category A	
1841	ACETALDEHYDE AMMONIA	9		III	Category A	SG29
1843	AMMONIUM DINITRO-o-CRESOLATE, SOLID	6.1	P	II	Category B	SG15 SG16 SG30 SG63
1845	CARBON DIOXIDE, SOLID (DRY ICE)	9			Category C SW2	

UN Number	PROPER SHIPPING NAME (Note: When there is more than one packing group or PSN the UN No. has been annotated with a, b, c)	Class or division	Subsidiary risk(s)	Packing Group	Stowage and Handling	Segregation
1846	CARBON TETRACHLORIDE	6.1	P	II	Category A SW2	
1847	POTASSIUM SULPHIDE, HYDRATED with not less than 30% water of crystallization	8		II	Category A	SG35
1848	PROPIONIC ACID with not less than 10% and less than 90% acid, by mass	8		III	Category A	
1849	SODIUM SULPHIDE, HYDRATED with not less than 30% water	8		II	Category A	SG35
1851	MEDICINE, LIQUID, TOXIC, N.O.S.	6.1		II	Category C SW2	
1851	MEDICINE, LIQUID, TOXIC, N.O.S.	6.1		III	Category C SW2	
1854	BARIUM ALLOYS, PYROPHORIC	4.2		I	Category D	
1855	CALCIUM, PYROPHORIC or CALCIUM ALLOYS, PYROPHORIC	4.2		I	Category D	
1856	RAGS, OILY	4.2			Category A	
1857	TEXTILE WASTE, WET	4.2		III	Category A	
1858	HEXAFLUOROPROPYLENE (REFRIGERANT GAS R 1216)	2.2			Category A	
1859	SILICON TETRAFLUORIDE	2.3	8		Category D SW2	
1860	VINYL FLUORIDE, STABILIZED	2.1			Category E SW2	
1862	ETHYL CROTONATE	3		II	Category B	
1863	FUEL, AVIATION, TURBINE ENGINE	3		I	Category E	
1863	FUEL, AVIATION, TURBINE ENGINE	3		II	Category B	
1863	FUEL, AVIATION, TURBINE ENGINE	3		III	Category A	
1865	n-PROPYL NITRATE	3		II	Category D	SG6 SG8 SG10 SG12
1866	RESIN SOLUTION flammable	3		I	Category E	
1866	RESIN SOLUTION flammable	3		II	Category B	
1866	RESIN SOLUTION flammable	3		III	Category A	
1868	DECABORANE	4.1	6.1	II	Category A	SG17
1869	MAGNESIUM or MAGNESIUM ALLOYS with more than 50% magnesium in pellets, turnings or ribbons	4.1		III	Category A	SG17 SG32 SG35 SG36 SG52
1870	POTASSIUM BOROXYDRIDE	4.3		I	Category E	SG35
1871	TITANIUM HYDRIDE	4.1		II	Category E	
1872	LEAD DIOXIDE	5.1		III	Category A	
1873	PERCHLORIC ACID with more than 50% but not more than 72% acid, by mass	5.1	8	I	Category D	SG16
1884	BARIUM OXIDE	6.1		III	Category A	
1885	BENZIDINE	6.1		II	Category A	
1886	BENZYLIDENE CHLORIDE	6.1		II	Category D SW2	
1887	BROMOCHLOROMETHANE	6.1		III	Category A	
1888	CHLOROFORM	6.1		III	Category A SW2	

UN Number	PROPER SHIPPING NAME (Note: When there is more than one packing group or PSN the UN No. has been annotated with a, b, c)	Class or division	Subsidiary risk(s)	Packing Group	Stowage and Handling	Segregation
1889	CYANOGEN BROMIDE	6.1	8P	I	Category D SW2	SG35
1891	ETHYL BROMIDE	6.1		II	Category B SW2 SW5	
1892	ETHYLDICHLOROARSINE	6.1	P	I	Category D SW2	
1894	PHENYLMERCURIC HYDROXIDE	6.1	P	II	Category A	
1895	PHENYLMERCURIC NITRATE	6.1	P	II	Category A	
1897	TETRACHLOROETHYLENE	6.1	P	III	Category A SW2	
1898	ACETYL IODIDE	8		II	Category C SW2	
1902	DIISOCTYL ACID PHOSPHATE	8		III	Category A	
1903	DISINFECTANT, LIQUID, CORROSIVE, N.O.S.	8		I	Category B	
1903	DISINFECTANT, LIQUID, CORROSIVE, N.O.S.	8		II	Category B	
1903	DISINFECTANT, LIQUID, CORROSIVE, N.O.S.	8		III	Category A	
1905	SELENIC ACID	8		I	Category A	
1906	SLUDGE ACID	8		II	Category C SW15	
1907	SODA LIME with more than 4% sodium hydroxide	8		III	Category A	SG35
1908	CHLORITE SOLUTION	8		II	Category B	SG6 SG8 SG10 SG12 SG20
1908	CHLORITE SOLUTION	8		III	Category B	SG6 SG8 SG10 SG12 SG20
1910	CALCIUM OXIDE	8			-	
1911	DIBORANE	2.3	2.1		Category D SW2	SG46
1912	METHYL CHLORIDE AND METHYLENE CHLORIDE MIXTURE	2.1			Category D SW2	
1913	NEON, REFRIGERATED LIQUID	2.2			Category D	
1914	BUTYL PROPIONATES	3		III	Category A	
1915	CYCLOHEXANONE	3		III	Category A	
1916	2,2'-DICHLORODIETHYL ETHER	6.1	3	II	Category A	
1917	ETHYL ACRYLATE, STABILIZED	3		II	Category B SW2	
1918	ISOPROPYLBENZENE	3		III	Category A	
1919	METHYL ACRYLATE, STABILIZED	3		II	Category B	
1920	NONANES	3		III	Category A	
1921	PROPYLENEIMINE, STABILIZED	3	6.1	I	Category B SW2	
1922	PYRROLIDINE	3	8	II	Category B SW2	SG35
1923	CALCIUM DITHIONITE (CALCIUM HYDROSULPHITE)	4.2		II	Category E H1	
1928	METHYLMAGNESIUM BROMIDE IN ETHYL ETHER	4.3	3	I	Category D	
1929	POTASSIUM DITHIONITE (POTASSIUM HYDROSULPHITE)	4.2		II	Category E H1	

UN Number	PROPER SHIPPING NAME (Note: When there is more than one packing group or PSN the UN No. has been annotated with a, b, c)	Class or division	Subsidiary risk(s)	Packing Group	Stowage and Handling	Segregation
1931	ZINC DITHIONITE (ZINC HYDROSULPHITE)	9		III	Category A H1	SG11 SG20
1932	ZIRCONIUM, SCRAP	4.2		III	Category D	
1935	CYANIDE SOLUTION, N.O.S.	6.1	P	I	Category B SW2	SG35
1935	CYANIDE SOLUTION, N.O.S.	6.1	P	II	Category A SW2	SG35
1935	CYANIDE SOLUTION, N.O.S.	6.1	P	III	Category A SW2	SG35
1938	BROMOACETIC ACID SOLUTION	8		II	Category A SW2	
1938	BROMOACETIC ACID SOLUTION	8		III	Category A SW2	
1939	PHOSPHORUS OXYBROMIDE, SOLID	8		II	Category C SW1 SW2 H2	
1940	THIOGLYCOLIC ACID	8		II	Category A	
1941	DIBROMODIFLUOROMETHANE	9		III	Category A SW1	
1942	AMMONIUM NITRATE with not more than 0.2% total combustible material, including any organ	5.1		III	Category C SW1 SW14 SW23	SG16 SG42 SG45 SG47 SG48 SG51 SG56 SG58 SG59 SG61
1944	MATCHES, SAFETY (book, card or strike on box)	4.1		III	Category A	
1945	MATCHES, WAX 'VESTA'	4.1		III	Category B	
1950	AEROSOLS	2	SP63		- SW1 SW22	SG69
1951	ARGON, REFRIGERATED LIQUID	2.2			Category D	
1952	ETHYLENE OXIDE AND CARBON DIOXIDE MIXTURE with not more than 9% ethylene oxide	2.2			Category A	
1953	COMPRESSED GAS, TOXIC, FLAMMABLE, N.O.S.	2.3	2.1		Category D SW2	
1954	COMPRESSED GAS, FLAMMABLE, N.O.S.	2.1			Category D SW2	
1955	COMPRESSED GAS, TOXIC, N.O.S.	2.3			Category D SW2	
1956	COMPRESSED GAS, N.O.S.	2.2			Category A	
1957	DEUTERIUM, COMPRESSED	2.1			Category E SW2	
1958	1,2-DICHLORO-1,1,2,2-TETRAFLUOROETHANE (REFRIGERANT GAS R 114)	2.2			Category A	
1959	1,1-DIFLUOROETHYLENE (REFRIGERANT GAS R 1132a)	2.1			Category E SW2	
1961	ETHANE, REFRIGERATED LIQUID	2.1			Category D SW2	
1962	ETHYLENE	2.1			Category E SW2	
1963	HELIUM, REFRIGERATED LIQUID	2.2			Category D	

UN Number	PROPER SHIPPING NAME (Note: When there is more than one packing group or PSN the UN No. has been annotated with a, b, c)	Class or division	Subsidiary risk(s)	Packing Group	Stowage and Handling	Segregation
1964	HYDROCARBON GAS MIXTURE, COMPRESSED, N.O.S.	2.1			Category E SW2	
1965	HYDROCARBON GAS MIXTURE, LIQUEFIED, N.O.S.	2.1			Category E SW2	
1966	HYDROGEN, REFRIGERATED LIQUID	2.1			Category D SW2	SG46
1967	INSECTICIDE GAS, TOXIC, N.O.S.	2.3			Category D SW2	
1968	INSECTICIDE GAS, N.O.S.	2.2			Category A	
1969	ISOBUTANE	2.1			Category E SW2	
1970	KRYPTON, REFRIGERATED LIQUID	2.2			Category D	
1971	METHANE, COMPRESSED or NATURAL GAS, COMPRESSED with high methane content	2.1			Category E SW2	
1972	METHANE, REFRIGERATED LIQUID or NATURAL GAS, REFRIGERATED LIQUID with high methane conte	2.1			Category D SW2	
1973	CHLORODIFLUOROMETHANE AND CHLOROPENTAFLUROETHAN E MIXTURE with a fixed boiling point, with approximately 49% chlorodifluoromethane (REFRIGERANT GAS R 502)	2.2			Category A	
1974	CHLORODIFLUOROBROMOMET HANE (REFRIGERANT GAS R 12B1)	2.2			Category A	
1975	NITRIC OXIDE AND DINITROGEN TETROXIDE MIXTURE (NITRIC OXIDE AND NITROGEN DIOXIDE MIXTURE	2.3			Category D SW2	SG6 SG19
1976	OCTAFLUOROCYCLOBUTANE (REFRIGERANT GAS RC 318)	2.2			Category A	
1977	NITROGEN, REFRIGERATED LIQUID	2.2			Category D	
1978	PROPANE	2.1			Category E SW2	
1982	TETRAFLUOROMETHANE (REFRIGERANT GAS R 14)	2.2			Category A	
1983	1-CHLORO-2,2,2-TRIFLUOROETHANE (REFRIGERANT GAS R 133a)	2.2			Category A	
1984	TRIFLUOROMETHANE (REFRIGERANT GAS R 23)	2.2			Category A	
1986	ALCOHOLS, FLAMMABLE, TOXIC, N.O.S.	3	6.1	I	Category E SW2	
1986	ALCOHOLS, FLAMMABLE, TOXIC, N.O.S.	3	6.1	II	Category B SW2	
1986	ALCOHOLS, FLAMMABLE, TOXIC, N.O.S.	3	6.1	III	Category A	
1987	ALCOHOLS, N.O.S.	3		II	Category B	
1987	ALCOHOLS, N.O.S.	3		III	Category A	
1988	ALDEHYDES, FLAMMABLE, TOXIC, N.O.S.	3	6.1	I	Category E SW2	
1988	ALDEHYDES, FLAMMABLE, TOXIC, N.O.S.	3	6.1	II	Category B SW2	
1988	ALDEHYDES, FLAMMABLE, TOXIC, N.O.S.	3	6.1	III	Category A	
1989	ALDEHYDES, N.O.S.	3		I	Category E	
1989	ALDEHYDES, N.O.S.	3		II	Category B	
1989	ALDEHYDES, N.O.S.	3		III	Category A	
1990	BENZALDEHYDE	9		III	Category A	



UN Number	PROPER SHIPPING NAME (Note: When there is more than one packing group or PSN the UN No. has been annotated with a, b, c)	Class or division	Subsidiary risk(s)	Packing Group	Stowage and Handling	Segregation
1991	CHLOROPRENE, STABILIZED	3	6.1	I	Category D SW2	
1992	FLAMMABLE LIQUID, TOXIC, N.O.S.	3	6.1	I	Category E SW2	
1992	FLAMMABLE LIQUID, TOXIC, N.O.S.	3	6.1	II	Category B SW2	
1992	FLAMMABLE LIQUID, TOXIC, N.O.S.	3	6.1	III	Category A	
1993	FLAMMABLE LIQUID, N.O.S.	3		I	Category E	
1993	FLAMMABLE LIQUID, N.O.S.	3		II	Category B	
1993	FLAMMABLE LIQUID, N.O.S.	3		III	Category A	
1994	IRON PENTACARBONYL	6.1	3	I	Category D SW2	
1999	TARS, LIQUID, including road oils and cutback bitumens	3		II	Category B	
1999	TARS, LIQUID, including road oils and cutback bitumens	3		III	Category A	
2000	CELLULOID in block, rods, rolls, sheets, tubes, etc., except scrap	4.1		III	Category A	
2001	COBALT NAPHTHENATES, POWDER	4.1		III	Category A	
2002	CELLULOID, SCRAP	4.2		III	Category D	
2004	MAGNESIUM DIAMIDE	4.2		II	Category C	
2006	PLASTICS, NITROCELLULOSE-BASED, SELF-HEATING, N.O.S.	4.2		III	Category C	
2008	ZIRCONIUM POWDER, DRY	4.2		I	Category D	
2008	ZIRCONIUM POWDER, DRY	4.2		II	Category D	
2008	ZIRCONIUM POWDER, DRY	4.2		III	Category D	
2009	ZIRCONIUM, DRY finished sheets, strip or coiled wire	4.2		III	Category D	
2010	MAGNESIUM HYDRIDE	4.3		I	Category E	SG35
2011	MAGNESIUM PHOSPHIDE	4.3	6.1	I	Category E SW2 SW5	SG35
2012	POTASSIUM PHOSPHIDE	4.3	6.1	I	Category E SW2 SW5	SG35
2013	STRONTIUM PHOSPHIDE	4.3	6.1	I	Category E SW2 SW5	SG35
2014	HYDROGEN PEROXIDE, AQUEOUS SOLUTION with not less than 20% but not more than 60% hydroge	5.1	8	II	Category D SW1	SG16 SG59 SG72
2015	HYDROGEN PEROXIDE, STABILIZED or HYDROGEN PEROXIDE, AQUEOUS SOLUTION, STABILIZED with mo	5.1	8	I	Category D SW1	SG16 SG59
2016	AMMUNITION, TOXIC, NON-EXPLOSIVE without burster or expelling charge, non-fuzed	6.1		II	Category E SW2 H1	
2017	AMMUNITION, TEAR-PRODUCING, NON-EXPLOSIVE without burster or expelling charge, non-fuzed	6.1		II	Category E SW2 H1	
2018	CHLOROANILINES, SOLID	6.1		II	Category A	
2019	CHLOROANILINES, LIQUID	6.1		II	Category A	SG35
2020	CHLOROPHENOLS, SOLID	6.1		III	Category A	
2021	CHLOROPHENOLS, LIQUID	6.1		III	Category A	
2022	CRESYLIC ACID	6.1	8	II	Category B	

UN Number	PROPER SHIPPING NAME (Note: When there is more than one packing group or PSN the UN No. has been annotated with a, b, c)	Class or division	Subsidiary risk(s)	Packing Group	Stowage and Handling	Segregation
2023	EPICHLOROHYDRIN	6.1	3P	II	Category A SW2	
2024	MERCURY COMPOUND, LIQUID, N.O.S.	6.1	P	I	Category B SW2	
2024	MERCURY COMPOUND, LIQUID, N.O.S.	6.1	P	II	Category B SW2	
2024	MERCURY COMPOUND, LIQUID, N.O.S.	6.1	P	III	Category B SW2	
2025	MERCURY COMPOUND, SOLID, N.O.S.	6.1	P	I	Category A	
2025	MERCURY COMPOUND, SOLID, N.O.S.	6.1	P	II	Category A	
2025	MERCURY COMPOUND, SOLID, N.O.S.	6.1	P	III	Category A	
2026	PHENYLMERCURIC COMPOUND, N.O.S.	6.1	P	I	Category A	
2026	PHENYLMERCURIC COMPOUND, N.O.S.	6.1	P	II	Category A	
2026	PHENYLMERCURIC COMPOUND, N.O.S.	6.1	P	III	Category A	
2027	SODIUM ARSENITE, SOLID	6.1		II	Category A	
2028	BOMBS, SMOKE, NON-EXPLOSIVE with corrosive liquid, without initiating device	8		II	Category E SW2	
2029	HYDRAZINE, ANHYDROUS	8	3/6.1	I	Category D SW2	SG5 SG8 SG35
2030	HYDRAZINE, AQUEOUS SOLUTION with more than 37% hydrazine, by mass	8	6.1	I	Category D SW2	SG35
2030	HYDRAZINE, AQUEOUS SOLUTION with more than 37% hydrazine, by mass	8	6.1	II	Category D SW2	SG35
2030	HYDRAZINE, AQUEOUS SOLUTION with more than 37% hydrazine, by mass	8	6.1	III	Category D SW2	SG35
2031	NITRIC ACID other than red fuming, with more than 70% nitric acid	8	5.1	I	Category D	SG6 SG16 SG17 SG19
2031	NITRIC ACID other than red fuming, with at least 65% but not more than 70% nitric acid	8	5.1	II	Category D	SG6 SG16 SG17 SG19
2031	NITRIC ACID other than red fuming, with less than 65% nitric acid	8		II	Category D	
2032	NITRIC ACID, RED FUMING	8	5.1/6.1	I	Category D SW2	SG6 SG16 SG17 SG19
2033	POTASSIUM MONOXIDE	8		II	Category A	SG22 SG35
2034	HYDROGEN AND METHANE MIXTURE, COMPRESSED	2.1			Category E SW2	SG46
2035	1,1,1-TRIFLUOROETHANE (REFRIGERANT GAS R 143a)	2.1			Category B SW2	
2036	XENON	2.2			Category A	
2037	RECEPTACLES, SMALL, CONTAINING GAS (GAS CARTRIDGES) without a release device, non refill	2			Category B SW2	
2038	DINITROTOLUENES, LIQUID	6.1		II	Category A	
2044	2,2-DIMETHYLPROPANE	2.1			Category E SW2	
2045	ISOBUTYL ALDEHYDE (ISOBUTYRALDEHYDE)	3		II	Category E SW2	



UN Number	PROPER SHIPPING NAME (Note: When there is more than one packing group or PSN the UN No. has been annotated with a, b, c)	Class or division	Subsidiary risk(s)	Packing Group	Stowage and Handling	Segregation
2046	CYMENES	3	P	III	Category A	
2047	DICHLOROPROPENES	3		II	Category B	
2047	DICHLOROPROPENES	3		III	Category A	
2048	DICYCLOPENTADIENE	3		III	Category A	
2049	DIETHYLBENZENES	3		III	Category A	
2050	DIISOBUTYLENES, ISOMERIC COMPOUNDS	3		II	Category B	
2051	2-DIMETHYLAMINOETHANOL	8	3	II	Category A	
2052	DIPENTENE	3	P	III	Category A	
2053	METHYL ISOBUTYL CARBINOL	3		III	Category A	
2054	MORPHOLINE	8	3	I	Category A	
2055	STYRENE MONOMER, STABILIZED	3		III	Category A	
2056	TETRAHYDROFURAN	3		II	Category B	
2057	TRIPROPYLENE	3		II	Category B	
2057	TRIPROPYLENE	3		III	Category A	
2058	VALERALDEHYDE	3		II	Category B	
2059	NITROCELLULOSE SOLUTION, FLAMMABLE with not more than 12.6% nitrogen, by dry mass, and n	3		I	Category E	
2059	NITROCELLULOSE SOLUTION, FLAMMABLE with not more than 12.6% nitrogen, by dry mass, and n	3		II	Category B	
2059	NITROCELLULOSE SOLUTION, FLAMMABLE with not more than 12.6% nitrogen, by dry mass, and n	3		III	Category A	
2067	AMMONIUM NITRATE BASED FERTILIZER	5.1		III	Category C SW1 SW14 SW23	SG16 SG42 SG45 SG47 SG48 SG51 SG56 SG58 SG59 SG61
2071	AMMONIUM NITRATE BASED FERTILIZER	9		III	Category A SW26	
2073	AMMONIA SOLUTION relative density less than 0.880 at 15°C in water, with more than 35% b	2.2			Category E SW2	SG35 SG46
2074	ACRYLAMIDE, SOLID	6.1		III	Category A SW1 H2	
2075	CHLORAL, ANHYDROUS, STABILIZED	6.1		II	Category D SW2	
2076	CRESOLS, LIQUID	6.1	8	II	Category B	
2077	alpha-NAPHTHYLAMINE	6.1		III	Category A	
2078	TOLUENE DIISOCYANATE	6.1		II	Category C SW1 SW2	
2079	DIETHYLENETRIAMINE	8		II	Category A SW2	SG35
2186	HYDROGEN CHLORIDE, REFRIGERATED LIQUID	2.3	8		-	
2187	CARBON DIOXIDE, REFRIGERATED LIQUID	2.2			Category D	
2188	ARSINE	2.3	2.1		Category D SW2	

UN Number	PROPER SHIPPING NAME (Note: When there is more than one packing group or PSN the UN No. has been annotated with a, b, c)	Class or division	Subsidiary risk(s)	Packing Group	Stowage and Handling	Segregation
2189	DICHLOROSILANE	2.3	2.1/8		Category D SW2	SG4 SG9 SG72
2190	OXYGEN DIFLUORIDE, COMPRESSED	2.3	5.1/8		Category D SW2 H1	SG6 SG19
2191	SULPHURYL FLUORIDE	2.3			Category D SW2	
2192	GERMANE	2.3	2.1		Category D SW2	
2193	HEXAFLUOROETHANE (REFRIGERANT GAS R 116)	2.2			Category A	
2194	SELENIUM HEXAFLUORIDE	2.3	8		Category D SW2	
2195	TELLURIUM HEXAFLUORIDE	2.3	8		Category D SW2	
2196	TUNGSTEN HEXAFLUORIDE	2.3	8		Category D SW2	
2197	HYDROGEN IODIDE, ANHYDROUS	2.3	8		Category D SW2	
2198	PHOSPHORUS PENTAFLUORIDE	2.3	8		Category D SW2	
2199	PHOSPHINE	2.3	2.1		Category D SW2	
2200	PROPADIENE, STABILIZED	2.1			Category B SW2	
2201	NITROUS OXIDE, REFRIGERATED LIQUID	2.2			Category D SW2	
2202	HYDROGEN SELENIDE, ANHYDROUS	2.3	2.1		Category D SW2	
2203	SILANE	2.1			Category E SW2	SG43 SG46
2204	CARBONYL SULPHIDE	2.3			Category D SW2	
2205	ADIPONITRILE	6.1		III	Category A	
2206	ISOCYANATES, TOXIC, N.O.S. or ISOCYANATE SOLUTION, TOXIC, N.O.S.	6.1		II	Category E SW1 SW2	
2206	ISOCYANATES, TOXIC, N.O.S. or ISOCYANATE SOLUTION, TOXIC, N.O.S.	6.1		III	Category E SW1 SW2	
2208	CALCIUM HYPOCHLORITE MIXTURE, DRY with more than 10% but not more than 39% available chlorine	5.1		III	Category D SW1 SW11	SG35 SG38 SG49 SG53 SG60
2209	FORMALDEHYDE SOLUTION with not less than 25% formaldehyde	8		III	Category A	
2210	MANEB or MANEB PREPARATION with not less than 60% maneb	4.2	4.3 P	III	Category A	SG29
2211	POLYMERIC BEADS, EXPANDABLE evolving flammable vapour	9		III	Category E SW1 SW6	SG5 SG14
2212	BLUE ASBESTOS (crocidolite) or BROWN ASBESTOS (amosite, misorite)	9		II	Category A SW2	SG29
2213	PARAFORMALDEHYDE	4.1		III	Category A SW23	
2214	PHTHALIC ANHYDRIDE with more than 0.05% of maleic anhydride	8		III	Category A	

UN Number	PROPER SHIPPING NAME (Note: When there is more than one packing group or PSN the UN No. has been annotated with a, b, c)	Class or division	Subsidiary risk(s)	Packing Group	Stowage and Handling	Segregation
2215	MALEIC ANHYDRIDE	8		III	Category A	SG50 SG57
2215	MALEIC ANHYDRIDE, MOLTEN	8		III	Category A	SG50 SG57
2216	FISHMEAL (FISHSCRAP), STABILIZED Anti-oxidant treated. Moisture content greater than 5% but not exceeding 12%, by mass. Fat content not more than 15%	9		III	Category B SW24	SG18 SG65
2217	SEED CAKE with not more than 1.5% oil and not more than 11% moisture	4.2		III	Category A SW1 SW4 H1	
2218	ACRYLIC ACID, STABILIZED	8	3	II	Category C SW1 SW2	
2219	ALLYL GLYCIDYL ETHER	3		III	Category A	
2222	ANISOLE	3		III	Category A	
2224	BENZONITRILE	6.1		II	Category A SW2	SG35
2225	BENZENESULPHONYL CHLORIDE	8		III	Category A SW2	
2226	BENZOTRICHLORIDE	8		II	Category A SW2	
2227	n-BUTYL METHACRYLATE, STABILIZED	3		III	Category A	
2232	2-CHLOROETHANAL	6.1		I	Category D SW2	
2233	CHLOROANISIDINES	6.1		III	Category A	
2234	CHLOROBENZOTRIFLUORIDES	3		III	Category A SW2	
2235	CHLOROBENZYL CHLORIDES, LIQUID	6.1	P	III	Category A	
2236	3-CHLORO-4-METHYLPHENYLISOCYANATE, LIQUID	6.1		II	Category B SW2	
2237	CHLORONITROANILINES	6.1	P	III	Category A	
2238	CHLOROTOLUENES	3		III	Category A	
2239	CHLOROTOLUIDINES, SOLID	6.1		III	Category A	
2240	CHROMOSULPHURIC ACID	8		I	Category B SW2	SG6 SG16 SG17 SG19
2241	CYCLOHEPTANE	3		II	Category B SW2	
2242	CYCLOHEPTENE	3		II	Category B	
2243	CYCLOHEXYL ACETATE	3		III	Category A	
2244	CYCLOPENTANOL	3		III	Category A	
2245	CYCLOPENTANONE	3		III	Category A	
2246	CYCLOPENTENE	3		II	Category E	
2247	n-DECANE	3		III	Category A	
2248	DI-n-BUTYLAMINE	8	3	II	Category A	
2249	DICHLORODIMETHYL ETHER, SYMMETRICAL	6.1	3	I	Category D SW2	
2250	DICHLOROPHENYL ISOCYANATES	6.1		II	Category B SW1 SW2	

UN Number	PROPER SHIPPING NAME (Note: When there is more than one packing group or PSN the UN No. has been annotated with a, b, c)	Class or division	Subsidiary risk(s)	Packing Group	Stowage and Handling	Segregation
2251	BICYCLO[2.2.1]HEPTA-2,5-DIENE, STABILIZED (2,5-NORBORNADIENE, STABILIZED)	3		II	Category D	
2252	1,2-DIMETHOXYETHANE	3		II	Category B	
2253	N,N-DIMETHYLANILINE	6.1		II	Category A	
2254	MATCHES, FUSEE	4.1		III	Category A	
2256	CYCLOHEXENE	3		II	Category E	
2257	POTASSIUM	4.3		I	Category D	SG35
2258	1,2-PROPYLENEDIAMINE	8	3	II	Category A SW2	
2259	TRIETHYLENETETRAMINE	8		II	Category B SW2	SG35
2260	TRIPROPYLAMINE	3	8	III	Category A SW2	
2261	XYLENOLS, SOLID	6.1		II	Category A	
2262	DIMETHYLCARBAMOYL CHLORIDE	8		II	Category A SW2	
2263	DIMETHYLCYCLOHEXANES	3		II	Category B	
2264	N,N-DIMETHYLCYCLOHEXYLAMINE	8	3	II	Category A SW2	
2265	N,N-DIMETHYLFORMAMIDE	3		III	Category A	
2266	N,N-DIMETHYL PROPYLAMINE	3	8	II	Category B SW2	
2267	DIMETHYL THIOPHOSPHORYL CHLORIDE	6.1	8	II	Category B SW1	
2269	3,3'-IMINODIPROPYLAMINE	8		III	Category A	
2270	ETHYLAMINE, AQUEOUS SOLUTION with not less than 50% but not more than 70% ethylamine	3	8	II	Category B SW2	SG35
2271	ETHYL AMYL KETONES	3		III	Category A	
2272	N-ETHYLANILINE	6.1		III	Category A	SG17 SG35
2273	2-ETHYLANILINE	6.1		III	Category A	SG17 SG35
2274	N-ETHYL-N-BENZYLANILINE	6.1		III	Category A	
2275	2-ETHYLBUTANOL	3		III	Category A	
2276	2-ETHYLHEXYLAMINE	3	8	III	Category A SW2	
2277	ETHYL METHACRYLATE, STABILIZED	3		II	Category B	
2278	n-HEPTENE	3		II	Category B	
2279	HEXACHLOROBUTADIENE	6.1	P	III	Category A	
2280	HEXAMETHYLENEDIAMINE, SOLID	8		III	Category A SW1 H2	
2280	HEXAMETHYLENEDIAMINE, MOLTEN	8		III	Category A SW1 H2	
2281	HEXAMETHYLENE DIISOCYANATE	6.1		II	Category C SW2 H1	
2282	HEXANOLS	3		III	Category A	
2283	ISOBUTYL METHACRYLATE, STABILIZED	3		III	Category A	
2284	ISOBUTYRONITRILE	3	6.1	II	Category E SW2	

UN Number	PROPER SHIPPING NAME (Note: When there is more than one packing group or PSN the UN No. has been annotated with a, b, c)	Class or division	Subsidiary risk(s)	Packing Group	Stowage and Handling	Segregation
2285	ISOCYANATOBENZOTRIFLUORIDES	6.1	3	II	Category D SW1 SW2	
2286	PENTAMETHYLHEPTANE	3		III	Category A	
2287	ISOHEPTENES	3		II	Category B	
2288	ISOHEXENES	3		II	Category E	
2289	ISOPHORONEDIAMINE	8		III	Category A	
2290	ISOPHORONE DIISOCYANATE	6.1		III	Category B SW2	
2291	LEAD COMPOUND, SOLUBLE, N.O.S.	6.1	P	III	Category A	
2293	4-METHOXY-4-METHYLPENTAN-2-ONE	3		III	Category A	
2294	N-METHYLANILINE	6.1		III	Category A	
2295	METHYL CHLOROACETATE	6.1	3	I	Category D	
2296	METHYLCYCLOHEXANE	3		II	Category B	
2297	METHYLCYCLOHEXANONES	3		III	Category A	
2298	METHYLCYCLOPENTANE	3		II	Category B	
2299	METHYL DICHLOROACETATE	6.1		III	Category A	
2300	2-METHYL-5-ETHYLPYRIDINE	6.1		III	Category A	
2301	2-METHYLFURAN	3		II	Category E	
2302	5-METHYLHEXAN-2-ONE	3		III	Category A	
2303	ISOPROPENYLBENZENE	3		III	Category A	
2304	NAPHTHALENE, MOLTEN	4.1		III	Category C	
2305	NITROBENZENESULPHONIC ACID	8		II	Category A	
2306	NITROBENZOTRIFLUORIDES, LIQUID	6.1	P	II	Category A SW2	
2307	3-NITRO-4-CHLOROBENZOTRIFLUORIDE	6.1	P	II	Category A SW2	
2308	NITROSYLSULPHURIC ACID, LIQUID	8		II	Category D SW2	SG6 SG16 SG17 SG19
2309	OCTADIENE	3		II	Category B	
2310	PENTANE-2,4-DIONE	3	6.1	III	Category A	
2311	PHENETIDINES	6.1		III	Category A	
2312	PHENOL, MOLTEN	6.1		II	Category B SW2	
2313	PICOLINES	3		III	Category A SW2	
2315	POLYCHLORINATED BIPHENYLS, LIQUID	9	P	II	Category A	SG50
2316	SODIUM CUPROCYANIDE, SOLID	6.1	P	I	Category A	SG35
2317	SODIUM CUPROCYANIDE SOLUTION	6.1	P	I	Category B SW2	SG35
2318	SODIUM HYDROSULPHIDE with less than 25% water of crystallization	4.2		II	Category A	SG35
2319	TERPENE HYDROCARBONS, N.O.S.	3		III	Category A	
2320	TETRAETHYLENEPENTAMINE	8		III	Category A	SG35
2321	TRICHLOROBENZENES, LIQUID	6.1	P	III	Category A	

UN Number	PROPER SHIPPING NAME (Note: When there is more than one packing group or PSN the UN No. has been annotated with a, b, c)	Class or division	Subsidiary risk(s)	Packing Group	Stowage and Handling	Segregation
2322	TRICHLOROBUTENE	6.1	P	II	Category A SW1 SW2	
2323	TRIETHYL PHOSPHITE	3		III	Category A	
2324	TRIIISOBUTYLENE	3		III	Category A	
2325	1,3,5-TRIMETHYLBENZENE	3		III	Category A	
2326	TRIMETHYLCYCLOHEXYLAMINE	8		III	Category A	
2327	TRIMETHYLHEXAMETHYLENEDIAMINES	8		III	Category A	
2328	TRIMETHYLHEXAMETHYLENE DIISOCYANATE	6.1		III	Category B	
2329	TRIMETHYL PHOSPHITE	3		III	Category A	
2330	UNDECANE	3		III	Category A	
2331	ZINC CHLORIDE, ANHYDROUS	8		III	Category A	
2332	ACETALDEHYDE OXIME	3		III	Category A	
2333	ALLYL ACETATE	3	6.1	II	Category E SW2	
2334	ALLYLAMINE	6.1	3	I	Category D SW2	
2335	ALLYL ETHYL ETHER	3	6.1	II	Category E SW2	
2336	ALLYL FORMATE	3	6.1	I	Category E SW2	
2337	PHENYL MERCAPTAN	6.1	3	I	Category D SW2	SG35
2338	BENZOTRIFLUORIDE	3		II	Category B SW2	
2339	2-BROMOBUTANE	3		II	Category B SW2	
2340	2-BROMOETHYL ETHYL ETHER	3		II	Category B SW2	
2341	1-BROMO-3-METHYLBUTANE	3		III	Category A	
2342	BROMOMETHYLPROPANES	3		II	Category B	
2343	2-BROMOPENTANE	3		II	Category B	
2344	BROMOPROPANES	3		II	Category B SW2	
2344	BROMOPROPANES	3		III	Category A	
2345	3-BROMOPROPYNE	3		II	Category D SW2	
2346	BUTANEDIONE	3		II	Category B	
2347	BUTYL MERCAPTANS	3		II	Category B	SG35 SG50 SG57
2348	BUTYL ACRYLATES, STABILIZED	3		III	Category A	
2350	BUTYL METHYL ETHER	3		II	Category B	
2351	BUTYL NITRITES	3		II	Category B SW2	
2351	BUTYL NITRITES	3		III	Category A SW2	
2352	BUTYL VINYL ETHER, STABILIZED	3		II	Category B SW2	
2353	BUTYRYL CHLORIDE	3	8	II	Category C SW2	



UN Number	PROPER SHIPPING NAME (Note: When there is more than one packing group or PSN the UN No. has been annotated with a, b, c)	Class or division	Subsidiary risk(s)	Packing Group	Stowage and Handling	Segregation
2354	CHLOROMETHYL ETHYL ETHER	3	6.1	II	Category E SW2	
2356	2-CHLOROPROPANE	3		I	Category E	
2357	CYCLOHEXYLAMINE	8	3	II	Category A SW2	
2358	CYCLOOCTATETRAENE	3		II	Category B	
2359	DIALLYLAMINE	3	6.1/8	II	Category B SW2	SG5 SG8
2360	DIALLYL ETHER	3	6.1	II	Category E	
2361	DIISOBUTYLAMINE	3	8	III	Category A	
2362	1,1-DICHLOROETHANE	3		II	Category B SW2	
2363	ETHYL MERCAPTAN	3	P	I	Category E	SG50 SG57
2364	n-PROPYLBENZENE	3		III	Category A	
2366	DIETHYL CARBONATE	3		III	Category A	
2367	alpha-METHYLVALERALDEHYDE	3		II	Category B	
2368	alpha-PINENE	3		III	Category A	
2370	1-HEXENE	3		II	Category E	
2371	ISOPENTENES	3		I	Category E	
2372	1,2-DI(DIMETHYLAMINO)ETHANE	3		II	Category B	
2373	DIETHOXYMETHANE	3		II	Category B	
2374	3,3-DIETHOXYPROPENE	3		II	Category B	
2375	DIETHYL SULPHIDE	3		II	Category E	
2376	2,3-DIHYDROPYRAN	3		II	Category B	
2377	1,1-DIMETHOXYETHANE	3		II	Category B	
2378	2-DIMETHYLAMINOACETONITRILE	3	6.1	II	Category A SW2	SG35
2379	1,3-DIMETHYLBUTYLAMINE	3		II	Category B	SG35
2380	DIMETHYLDIETHOXSILANE	3		II	Category B	
2381	DIMETHYL DISULPHIDE	3	6.1	II	Category B SW2	
2382	DIMETHYLHYDRAZINE, SYMMETRICAL	6.1	3P	I	Category D SW2	SG17 SG35
2383	DIPROPYLAMINE	3	8	II	Category B	
2384	DI-n-PROPYL ETHER	3		II	Category B	
2385	ETHYL ISOBUTYRATE	3		II	Category B	
2386	1-ETHYLPYPERIDINE	3	8	II	Category B	SG35
2387	FLUOROBENZENE	3		II	Category B	
2388	FLUOROTOLUENES	3		II	Category B	
2389	FURAN	3		I	Category E SW2	
2390	2-IODOBUTANE	3		II	Category B	
2391	IODOMETHYLPROPANES	3		II	Category B	
2392	IODOPROPANES	3		III	Category A	
2393	ISOBUTYL FORMATE	3		II	Category B	
2394	ISOBUTYL PROPIONATE	3		III	Category B	

UN Number	PROPER SHIPPING NAME (Note: When there is more than one packing group or PSN the UN No. has been annotated with a, b, c)	Class or division	Subsidiary risk(s)	Packing Group	Stowage and Handling	Segregation
2395	ISOBUTYRYL CHLORIDE	3	8	II	Category C SW2	
2396	METHACRYLALDEHYDE, STABILIZED	3	6.1	II	Category E SW2	
2397	3-METHYLBUTAN-2-ONE	3		II	Category B	
2398	METHYL tert-BUTYL ETHER	3		II	Category E	
2399	1-METHYLPYPERIDINE	3	8	II	Category B	SG35
2400	METHYL ISOVALERATE	3		II	Category B	
2401	PIPERIDINE	8	3	I	Category D	SG35
2402	PROPANETHIOLS	3		II	Category E	SG50 SG57
2403	ISOPROPENYL ACETATE	3		II	Category B	
2404	PROPIONITRILE	3	6.1	II	Category E SW2	
2405	ISOPROPYL BUTYRATE	3		III	Category A	
2406	ISOPROPYL ISOBUTYRATE	3		II	Category B	
2407	ISOPROPYL CHLOROFORMATE	6.1	"3/8	I	Category D SW2	SG5 SG8
2409	ISOPROPYL PROPIONATE	3		II	Category B	
2410	1,2,3,6-TETRAHYDROPYRIDINE	3		II	Category B	
2411	BUTYRONITRILE	3	6.1	II	Category E SW2	
2412	TETRAHYDROTHIOPHENE	3		II	Category B	
2413	TETRAPROPYL ORTHOTITANATE	3		III	Category A	
2414	THIOPHENE	3		II	Category B SW2	
2416	TRIMETHYL BORATE	3		II	Category B	
2417	CARBONYL FLUORIDE	2.3			Category D SW2	
2418	SULPHUR TETRAFLUORIDE	2.3	8		Category D SW2	SG35
2419	BROMOTRIFLUOROETHYLENE	2.1			Category B SW2	
2420	HEXAFLUOROACETONE	2.3	8		Category D SW2	
2421	NITROGEN TRIOXIDE	2.3	"5.1/8		Category D SW2	SG6 SG19
2422	OCTAFLUOROBUT-2-ENE (REFRIGERANT GAS R 1318)	2.2			Category A	
2424	OCTAFLUOROPROPANE (REFRIGERANT GAS R 218)	2.2			Category A	
2426	AMMONIUM NITRATE, LIQUID (hot concentrated solution)	5.1			Category D	SG42 SG45 SG47 SG48 SG51 SG56 SG58 SG59 SG61
2427	POTASSIUM CHLORATE, AQUEOUS SOLUTION	5.1		II	Category B	SG38 SG49 SG62
2427	POTASSIUM CHLORATE, AQUEOUS SOLUTION	5.1		III	Category B	SG38 SG49 SG62



UN Number	PROPER SHIPPING NAME (Note: When there is more than one packing group or PSN the UN No. has been annotated with a, b, c)	Class or division	Subsidiary risk(s)	Packing Group	Stowage and Handling	Segregation
2428	SODIUM CHLORATE, AQUEOUS SOLUTION	5.1		II	Category B	SG38 SG49 SG62
2428	SODIUM CHLORATE, AQUEOUS SOLUTION	5.1		III	Category B	SG38 SG49 SG62
2429	CALCIUM CHLORATE, AQUEOUS SOLUTION	5.1		II	Category B	SG38 SG49 SG62
2429	CALCIUM CHLORATE, AQUEOUS SOLUTION	5.1		III	Category B	SG38 SG49 SG62
2430	ALKYLPHENOLS, SOLID, N.O.S. (including C2-C12 homologues)	8		I	Category B	
2430	ALKYLPHENOLS, SOLID, N.O.S. (including C2-C12 homologues)	8		II	Category B	
2430	ALKYLPHENOLS, SOLID, N.O.S. (including C2-C12 homologues)	8		III	Category A	
2431	ortho-ANISIDINE	6.1		III	Category A	
2432	N,N-DIETHYLANILINE	6.1		III	Category A	
2433	CHLORONITROTOLUENES, LIQUID	6.1	P	III	Category A	SG6 SG8 SG10 SG12
2434	DIBENZYL DICHLOROSILANE	8		II	Category C SW2	
2435	ETHYLPHENYL DICHLOROSILANE	8		II	Category C	
2436	THIOACETIC ACID	3		II	Category B	
2437	METHYLPHENYL DICHLOROSILANE	8		II	Category C SW2	
2438	TRIMETHYLACETYL CHLORIDE	6.1	"3/8	I	Category D SW1 SW2	SG5 SG8
2439	SODIUM HYDROGEN DIFLUORIDE	8		II	Category A SW1 SW2 H2	SG35
2440	STANNIC CHLORIDE PENTAHYDRATE	8		III	Category A	
2441	TITANIUM TRICHLORIDE, PYROPHORIC or TITANIUM TRICHLORIDE MIXTURE, PYROPHORIC	4.2	8	I	Category D SW2	
2442	TRICHLOROACETYL CHLORIDE	8		II	Category D SW2	
2443	VANADIUM OXYTRICHLORIDE	8		II	Category C SW2	
2444	VANADIUM TETRACHLORIDE	8		I	Category C SW2	
2446	NITROCRESOLS, SOLID	6.1		III	Category A	
2447	PHOSPHORUS, WHITE, MOLTEN	4.2	6.1P	I	Category D	
2448	SULPHUR, MOLTEN	4.1		III	Category C	SG17
2451	NITROGEN TRIFLUORIDE	2.2	5.1		Category D SW2	
2452	ETHYLACETYLENE, STABILIZED	2.1			Category B SW2	
2453	ETHYL FLUORIDE (REFRIGERANT GAS R 161)	2.1			Category E SW2	

UN Number	PROPER SHIPPING NAME (Note: When there is more than one packing group or PSN the UN No. has been annotated with a, b, c)	Class or division	Subsidiary risk(s)	Packing Group	Stowage and Handling	Segregation
2454	METHYL FLUORIDE (REFRIGERANT GAS R 41)	2.1			Category E SW2	
2455	METHYL NITRITE	2.2			-	
2456	2-CHLOROPROPENE	3		I	Category E	
2457	2,3-DIMETHYLBUTANE	3		II	Category E	
2458	HEXADIENES	3		II	Category B	
2459	2-METHYL-1-BUTENE	3		I	Category E	
2460	2-METHYL-2-BUTENE	3		II	Category E	
2461	METHYLPENTADIENES	3		II	Category E	
2463	ALUMINIUM HYDRIDE	4.3		I	Category E	
2464	BERYLLIUM NITRATE	5.1	6.1	II	Category A	
2465	DICHLOROISOCYANURIC ACID, DRY or DICHLOROISOCYANURIC ACID, SALTS	5.1		II	Category A H1	
2466	POTASSIUM SUPEROXIDE	5.1		I	Category E H1	SG16 SG35 SG59
2468	TRICHLOROISOCYANURIC ACID, DRY	5.1		II	Category A H1	
2469	ZINC BROMATE	5.1		III	Category A	SG38 SG49
2470	PHENYLACETONITRILE, LIQUID	6.1		III	Category A	SG35
2471	OSMIUM TETROXIDE	6.1		I	Category B SW2	
2473	SODIUM ARSANILATE	6.1		III	Category A	
2474	THIOPHOSGENE	6.1		I	Category D SW2	SG35
2475	VANADIUM TRICHLORIDE	8		III	Category A SW2	
2477	METHYL ISOTHIOCYANATE	6.1	3	I	Category D SW2	
2478	ISOCYANATES, FLAMMABLE, TOXIC, N.O.S. or ISOCYANATE SOLUTION, FLAMMABLE, TOXIC, N.O.S.	3	6.1	II	Category D SW2	
2478	ISOCYANATES, FLAMMABLE, TOXIC, N.O.S. or ISOCYANATE SOLUTION, FLAMMABLE, TOXIC, N.O.S.	3	6.1	III	Category A	
2480	METHYL ISOCYANATE	6.1	3	I	Category D SW2	SG35
2481	ETHYL ISOCYANATE	6.1	3	I	Category D SW2	SG35
2482	n-PROPYL ISOCYANATE	6.1	3	I	Category D SW2	
2483	ISOPROPYL ISOCYANATE	6.1	3	I	Category D SW2	
2484	tert-BUTYL ISOCYANATE	6.1	3	I	Category D SW2	
2485	n-BUTYL ISOCYANATE	6.1	3	I	Category D SW2	
2486	ISOBUTYL ISOCYANATE	6.1	3	I	Category D SW2	
2487	PHENYL ISOCYANATE	6.1	3	I	Category D SW2	
2488	CYCLOHEXYL ISOCYANATE	6.1	3	I	Category D SW2	

UN Number	PROPER SHIPPING NAME (Note: When there is more than one packing group or PSN the UN No. has been annotated with a, b, c)	Class or division	Subsidiary risk(s)	Packing Group	Stowage and Handling	Segregation
2490	DICHLOROISOPROPYL ETHER	6.1		II	Category B	
2491	ETHANOLAMINE or ETHANOLAMINE SOLUTION	8		III	Category A	SG35
2493	HEXAMETHYLENEIMINE	3	8	II	Category B SW2	
2495	IODINE PENTAFLUORIDE	5.1	"6.1/8	I	Category D SW1 SW2	SG6 SG16 SG19 SG35
2496	PROPIONIC ANHYDRIDE	8		III	Category A	
2498	1,2,3,6- TETRAHYDROBENZALDEHYDE	3		III	Category A	
2501	TRIS-(1-AZIRIDINYL) PHOSPHINE OXIDE SOLUTION	6.1		II	Category A	
2501	TRIS-(1-AZIRIDINYL) PHOSPHINE OXIDE SOLUTION	6.1		III	Category A	
2502	VALERYL CHLORIDE	8	3	II	Category C SW2	
2503	ZIRCONIUM TETRACHLORIDE	8		III	Category A	
2504	TETRABROMOETHANE	6.1	P	III	Category A	
2505	AMMONIUM FLUORIDE	6.1		III	Category A	SG35
2506	AMMONIUM HYDROGEN SULPHATE	8		II	Category A SW2	
2507	CHLOROPLATINIC ACID, SOLID	8		III	Category A	
2508	MOLYBDENUM PENTACHLORIDE	8		III	Category C SW2	
2509	POTASSIUM HYDROGEN SULPHATE	8		II	Category A	
2511	2-CHLOROPROPIONIC ACID	8		III	Category A	
2512	AMINOPHENOLS (o-, m-, p-)	6.1		III	Category A	
2513	BROMOACETYL BROMIDE	8		II	Category C SW2	SG36
2514	BROMOBENZENE	3		III	Category A	
2515	BROMOFORM	6.1	P	III	Category A SW1 SW2 H2	
2516	CARBON TETRABROMIDE	6.1	P	III	Category A SW1	
2517	1-CHLORO-1,1- DIFLUOROETHANE (REFRIGERANT GAS R 142b)	2.1			Category B SW2	
2518	1,5,9-CYCLODODECATRIENE	6.1		III	Category A SW2	
2520	CYCLOOCTADIENES	3		III	Category A	
2521	DIKETENE, STABILIZED	6.1	3	I	Category D SW2	SG20 SG21
2522	2-DIMETHYLAMINOETHYL METHACRYLATE	6.1		II	Category D SW2	
2524	ETHYL ORTHOFORMATE	3		III	Category A	
2525	ETHYL OXALATE	6.1		III	Category A	
2526	FURFURYLAMINE	3	8	III	Category A SW2	
2527	ISOBUTYL ACRYLATE, STABILIZED	3		III	Category A	
2528	ISOBUTYL ISOBUTYRATE	3		III	Category A	
2529	ISOBUTYRIC ACID	3	8	III	Category A	

UN Number	PROPER SHIPPING NAME (Note: When there is more than one packing group or PSN the UN No. has been annotated with a, b, c)	Class or division	Subsidiary risk(s)	Packing Group	Stowage and Handling	Segregation
2531	METHACRYLIC ACID, STABILIZED	8		II	Category C SW2	
2533	METHYL TRICHLOROACETATE	6.1		III	Category A	
2534	METHYLCHLOROSILANE	2.3	2.1/8		Category D SW2	SG4 SG9
2535	4-METHYLMORPHOLINE (N-METHYLMORPHOLINE)	3	8	II	Category B SW2	
2536	METHYLTETRAHYDROFURAN	3		II	Category B	
2538	NITRONAPHTHALENE	4.1		III	Category A	
2541	TERPINOLENE	3		III	Category A	
2542	TRIBUTYLAMINE	6.1		II	Category A	
2545	HAFNIUM POWDER, DRY	4.2		I	Category D	
2545	HAFNIUM POWDER, DRY	4.2		II	Category D	
2545	HAFNIUM POWDER, DRY	4.2		III	Category D	
2546	TITANIUM POWDER, DRY	4.2		I	Category D	
2546	TITANIUM POWDER, DRY	4.2		II	Category D	
2546	TITANIUM POWDER, DRY	4.2		III	Category D	
2547	SODIUM SUPEROXIDE	5.1		I	Category E H1	SG16 SG35 SG59
2548	CHLORINE PENTAFLUORIDE	2.3	5.1/8		Category D SW2	SG6 SG19
2552	HEXAFLUOROACETONE HYDRATE, LIQUID	6.1		II	Category B SW2	
2554	METHYLALLYL CHLORIDE	3		II	Category E	
2555	NITROCELLULOSE WITH WATER (not less than 25% water, by mass)	4.1		II	Category E	SG7 SG30
2556	NITROCELLULOSE WITH ALCOHOL (not less than 25% alcohol, by mass, and not more than 12.6%)	4.1		II	Category D	SG7 SG30
2557	NITROCELLULOSE with not more than 12.6% nitrogen, by dry mass, MIXTURE WITH or WITHOUT PLASTICIZER, WITH or WITHOUT PIGMENT	4.1		II	Category D	SG7 SG30
2558	EPIBROMOHYDRIN	6.1	3P	I	Category D SW2	
2560	2-METHYLPENTAN-2-OL	3		III	Category A	
2561	3-METHYL-1-BUTENE	3		I	Category E	
2564	TRICHLOROACETIC ACID SOLUTION	8		II	Category B	
2564	TRICHLOROACETIC ACID SOLUTION	8		III	Category B	
2565	DICYCLOHEXYLAMINE	8		III	Category A	
2567	SODIUM PENTACHLOROPHENATE	6.1	P	II	Category A	
2570	CADMIUM COMPOUND	6.1		I	Category A	
2570	CADMIUM COMPOUND	6.1		II	Category A	
2570	CADMIUM COMPOUND	6.1		III	Category A	
2571	ALKYLSULPHURIC ACIDS	8		II	Category C SW15	
2572	PHENYLHYDRAZINE	6.1		II	Category A SW2	
2573	THALLIUM CHLORATE	5.1	6.1P	II	Category A	SG38 SG49

UN Number	PROPER SHIPPING NAME (Note: When there is more than one packing group or PSN the UN No. has been annotated with a, b, c)	Class or division	Subsidiary risk(s)	Packing Group	Stowage and Handling	Segregation
2574	TRICRESYL PHOSPHATE with more than 3% ortho-isomer	6.1	P	II	Category A	
2576	PHOSPHORUS OXYBROMIDE, MOLTEN	8		II	Category C SW2	
2577	PHENYLACETYL CHLORIDE	8		II	Category C SW2	
2578	PHOSPHORUS TRIOXIDE	8		III	Category A SW1 H2	
2579	PIPERAZINE	8		III	Category A SW1 H2	SG35
2580	ALUMINIUM BROMIDE SOLUTION	8		III	Category A	
2581	ALUMINIUM CHLORIDE SOLUTION	8		III	Category A	
2582	FERRIC CHLORIDE SOLUTION	8		III	Category A	
2583	ALKYLSULPHONIC ACIDS, SOLID or ARYLSULPHONIC ACIDS, SOLID with more than 5% free sulphur	8		II	Category A	
2584	ALKYLSULPHONIC ACIDS, LIQUID or ARYLSULPHONIC ACIDS, LIQUID with more than 5% free sulph	8		II	Category B	
2585	ALKYLSULPHONIC ACIDS, SOLID or ARYLSULPHONIC ACIDS, SOLID with not more than 5% free sul	8		III	Category A	
2586	ALKYLSULPHONIC ACIDS, LIQUID or ARYLSULPHONIC ACIDS, LIQUID with not more than 5% free s	8		III	Category B	
2587	BENZOQUINONE	6.1		II	Category A	
2588	PESTICIDE, SOLID, TOXIC, N.O.S.	6.1		I	Category A SW2	
2588	PESTICIDE, SOLID, TOXIC, N.O.S.	6.1		II	Category A SW2	
2588	PESTICIDE, SOLID, TOXIC, N.O.S.	6.1		III	Category A SW2	
2589	VINYL CHLOROACETATE	6.1	3	II	Category A	
2590	WHITE ASBESTOS (chrysotile, actinolite, anthophyllite, tremolite)	9		III	Category A SW2	SG29
2591	XENON, REFRIGERATED LIQUID	2.2			Category D	
2599	CHLOROTRIFLUOROMETHANE AND TRIFLUOROMETHANE AZEOTROPIC MIXTURE with approximately 60% ch	2.2			Category A	
2601	CYCLOBUTANE	2.1			Category B SW2	
2602	DICHLORODIFLUOROMETHANE AND DIFLUOROETHANE AZEOTROPIC MIXTURE with approximately 74% dic	2.2			Category A	
2603	CYCLOHEPTATRIENE	3	6.1	II	Category E SW2	
2604	BORON TRIFLUORIDE DIETHYL ETHERATE	8	3	I	Category D SW2	
2605	METHOXYMETHYL ISOCYANATE	6.1	3	I	Category D SW2	
2606	METHYL ORTHOSILICATE	6.1	3	I	Category D SW2	
2607	ACROLEIN DIMER, STABILIZED	3		III	Category A SW2	
2608	NITROPROPANES	3		III	Category A	
2609	TRIALLYL BORATE	6.1		III	Category A H1	

UN Number	PROPER SHIPPING NAME (Note: When there is more than one packing group or PSN the UN No. has been annotated with a, b, c)	Class or division	Subsidiary risk(s)	Packing Group	Stowage and Handling	Segregation
2610	TRIALLYLAMINE	3	8	III	Category A SW2	
2611	PROPYLENE CHLOROHYDRIN	6.1	3	II	Category A SW1 SW2 H2	
2612	METHYL PROPYL ETHER	3		II	Category E SW2	
2614	METHALLYL ALCOHOL	3		III	Category A	
2615	ETHYL PROPYL ETHERS	3		II	Category E	
2616	TRIISOPROPYL BORATE	3		II	Category B	
2616	TRIISOPROPYL BORATE	3		III	Category A	
2617	METHYLCYCLOHEXANOLS flammable	3		III	Category A	
2618	VINYLTOLUENES, STABILIZED	3		III	Category A	
2619	BENZYLDIMETHYLAMINE	8	3	II	Category A SW1 SW2	
2620	AMYL BUTYRATES	3		III	Category A	
2621	ACETYL METHYL CARBINOL	3		III	Category A	
2622	GLYCIDALDEHYDE	3	6.1	II	Category A SW2	
2623	FIRELIGHTERS, SOLID with flammable liquid	4.1		III	Category A	SG35
2624	MAGNESIUM SILICIDE	4.3		II	Category B SW5 H1	
2626	CHLORIC ACID, AQUEOUS SOLUTION with not more than 10% chloric acid	5.1		II	Category D	SG38 SG49
2627	NITRITES, INORGANIC, N.O.S.	5.1		II	Category A	SG38 SG49 SG62
2628	POTASSIUM FLUOROACETATE	6.1		I	Category E	
2629	SODIUM FLUOROACETATE	6.1		I	Category E	
2630	SELENATES or SELENITES	6.1		I	Category E	
2642	FLUOROACETIC ACID	6.1		I	Category E	
2643	METHYL BROMOACETATE	6.1		II	Category D SW2	
2644	METHYL IODIDE	6.1		I	Category D SW1 SW2 H2	
2645	PHENACYL BROMIDE	6.1		II	Category B SW2	
2646	HEXACHLOROCYCLOPENTADIE NE	6.1		I	Category D SW2	
2647	MALONONITRILE	6.1		II	Category A SW1 H2	
2648	1,2-DIBROMOBUTAN-3-ONE	6.1		II	Category B SW2	
2649	1,3-DICHLOROACETONE	6.1		II	Category B SW1 SW2 H2	
2650	1,1-DICHLORO-1-NITROETHANE	6.1		II	Category A SW1 SW2 H2	SG17



UN Number	PROPER SHIPPING NAME (Note: When there is more than one packing group or PSN the UN No. has been annotated with a, b, c)	Class or division	Subsidiary risk(s)	Packing Group	Stowage and Handling	Segregation
2651	4,4'-DIAMINODIPHENYLMETHANE	6.1	P	III	Category A	
2653	BENZYL IODIDE	6.1		II	Category B SW2 H2	
2655	POTASSIUM FLUROSILICATE	6.1		III	Category A	SG35
2656	QUINOLINE	6.1		III	Category A SW1 H2	
2657	SELENIUM DISULPHIDE	6.1		II	Category A	
2659	SODIUM CHLOROACETATE	6.1		III	Category A	
2660	NITROTOLUIDINES (MONO)	6.1		III	Category A	
2661	HEXACHLOROACETONE	6.1		III	Category B SW1 SW2 H2	
2664	DIBROMOMETHANE	6.1		III	Category A	
2667	BUTYLTOLUENES	6.1		III	Category A	
2668	CHLOROACETONITRILE	6.1	3	I	Category D SW1 SW2 H2	SG35
2669	CHLOROCRESOLS SOLUTION	6.1		II	Category A SW1 H2	
2669	CHLOROCRESOLS SOLUTION	6.1		III	Category A SW1 H2	
2670	CYANURIC CHLORIDE	8		II	Category A SW1 SW2 H2	
2671	AMINOPYRIDINES (o-, m-, p-)	6.1		II	Category B SW1 SW2 H2	SG35
2672	AMMONIA SOLUTION relative density between 0.880 and 0.957 at 15°C in water, with more than 10% but not more than 35% ammonia	8		III	Category A SW2 SW5	SG35
2673	2-AMINO-4-CHLOROPHENOL	6.1		II	Category A	
2674	SODIUM FLUROSILICATE	6.1		III	Category A	SG35
2676	STIBINE	2.3	2.1		Category D SW2	
2677	RUBIDIUM HYDROXIDE SOLUTION	8		II	Category A	SG22 SG35
2677	RUBIDIUM HYDROXIDE SOLUTION	8		III	Category A	SG22 SG35
2678	RUBIDIUM HYDROXIDE, SOLID	8		II	Category A	SG22 SG35
2679	LITHIUM HYDROXIDE SOLUTION	8		II	Category A	SG22 SG35
2679	LITHIUM HYDROXIDE SOLUTION	8		III	Category A	SG22 SG35
2680	LITHIUM HYDROXIDE	8		II	Category A	SG35
2681	CAESIUM HYDROXIDE SOLUTION	8		II	Category A	SG22 SG35
2681	CAESIUM HYDROXIDE SOLUTION	8		III	Category A	SG22 SG35
2682	CAESIUM HYDROXIDE	8		II	Category A	SG22 SG35

UN Number	PROPER SHIPPING NAME (Note: When there is more than one packing group or PSN the UN No. has been annotated with a, b, c)	Class or division	Subsidiary risk(s)	Packing Group	Stowage and Handling	Segregation
2683	AMMONIUM SULPHIDE SOLUTION	8	3/6.1	II	Category B SW1 H2	SG35 SG68
2684	3-DIETHYLAMINOPROPYLAMINE	3	8	III	Category A	
2685	N,N-DIETHYLETHYLENEDIAMINE	8	3	II	Category A	
2686	2-DIETHYLAMINOETHANOL	8	3	II	Category A	
2687	DICYCLOHEXYLAMMONIUM NITRITE	4.1		III	Category A	
2688	1-BROMO-3-CHLOROPROPANE	6.1		III	Category A	
2689	GLYCEROL-alpha-MONOCHLOROHYDRIN	6.1		III	Category A	
2690	N,n-BUTYLIMIDAZOLE	6.1		II	Category A	
2691	PHOSPHORUS PENTABROMIDE	8		II	Category B SW1 SW2 H2	SG36 SG37
2692	BORON TRIBROMIDE	8		I	Category C SW1 H2	
2693	BISULPHITES, AQUEOUS SOLUTION, N.O.S.	8		III	Category A SW2	SG35
2698	TETRAHYDROPHTHALIC ANHYDRIDES with more than 0.05% maleic anhydride	8		III	Category A	
2699	TRIFLUOROACETIC ACID	8		I	Category B SW1 SW2 H2	
2705	1-PENTOL	8		II	Category B	SG20 SG21
2707	DIMETHYLDIOXANES	3		II	Category B	
2707	DIMETHYLDIOXANES	3		III	Category A	
2709	BUTYLBENZENES	3		III	Category A	
2710	DIPROPYL KETONE	3		III	Category A	
2713	ACRIDINE	6.1		III	Category A	
2714	ZINC RESINATE	4.1		III	Category A	
2715	ALUMINIUM RESINATE	4.1		III	Category A	
2716	1,4-BUTYNEEDIOL	6.1		III	Category A	SG35 SG36 SG55
2717	CAMPHOR synthetic	4.1		III	Category A	
2719	BARIUM BROMATE	5.1	6.1	II	Category A	SG38 SG49
2720	CHROMIUM NITRATE	5.1		III	Category A	
2721	COPPER CHLORATE	5.1		II	Category A	SG38 SG49
2722	LITHIUM NITRATE	5.1		III	Category A	
2723	MAGNESIUM CHLORATE	5.1		II	Category A	SG38 SG49
2724	MANGANESE NITRATE	5.1		III	Category A	
2725	NICKEL NITRATE	5.1		III	Category A	
2726	NICKEL NITRITE	5.1		III	Category A	SG38 SG49
2727	THALLIUM NITRATE	6.1	5.1P	II	Category A	
2728	ZIRCONIUM NITRATE	5.1		III	Category A	



UN Number	PROPER SHIPPING NAME (Note: When there is more than one packing group or PSN the UN No. has been annotated with a, b, c)	Class or division	Subsidiary risk(s)	Packing Group	Stowage and Handling	Segregation
2729	HEXACHLOROBENZENE	6.1		III	Category A	
2730	NITROANISOLES, LIQUID	6.1		III	Category A	
2732	NITROBROMOBENZENES, LIQUID	6.1		III	Category A	
2733	AMINES, FLAMMABLE, CORROSIVE, N.O.S. or POLYAMINES, FLAMMABLE, CORROSIVE, N.O.S.	3	8	I	Category D SW2	SG35
2733	AMINES, FLAMMABLE, CORROSIVE, N.O.S. or POLYAMINES, FLAMMABLE, CORROSIVE, N.O.S.	3	8	II	Category B SW2	SG35
2733	AMINES, FLAMMABLE, CORROSIVE, N.O.S. or POLYAMINES, FLAMMABLE, CORROSIVE, N.O.S.	3	8	III	Category A SW2	SG35
2734	AMINES, LIQUID, CORROSIVE, FLAMMABLE, N.O.S. or POLYAMINES, LIQUID, CORROSIVE, FLAMMABLE	8	3	I	Category A	SG35
2734	AMINES, LIQUID, CORROSIVE, FLAMMABLE, N.O.S. or POLYAMINES, LIQUID, CORROSIVE, FLAMMABLE	8	3	II	Category A	SG35
2735	AMINES, LIQUID, CORROSIVE, N.O.S. or POLYAMINES, LIQUID, CORROSIVE, N.O.S.	8		I	Category A	SG35
2735	AMINES, LIQUID, CORROSIVE, N.O.S. or POLYAMINES, LIQUID, CORROSIVE, N.O.S.	8		II	Category A	SG35
2735	AMINES, LIQUID, CORROSIVE, N.O.S. or POLYAMINES, LIQUID, CORROSIVE, N.O.S.	8		III	Category A	SG35
2738	N-BUTYLANILINE	6.1		II	Category A	SG17
2739	BUTYRIC ANHYDRIDE	8		III	Category A	
2740	n-PROPYL CHLOROFORMATE	6.1	"3/8	I	Category B SW2	SG5 SG8
2741	BARIUM HYPOCHLORITE with more than 22% available chlorine	5.1	6.1	II	Category B	SG35 SG38 SG49 SG53 SG60
2742	CHLOROFORMATES, TOXIC, CORROSIVE, FLAMMABLE, N.O.S.	6.1		II	Category A SW1 SW2 H1 H2	SG5 SG8
2743	n-BUTYL CHLOROFORMATE	6.1	"3/8	II	Category A SW1 SW2 H1 H2	SG5 SG8
2744	CYCLOBUTYL CHLOROFORMATE	6.1	"3/8	II	Category A SW1 SW2 H1 H2	SG5 SG8
2745	CHLOROMETHYL CHLOROFORMATE	6.1	8	II	Category A SW1 SW2 H1 H2	
2746	PHENYL CHLOROFORMATE	6.1	8	II	Category A SW1 SW2 H1 H2	
2747	tert-BUTYLCYCLOHEXYL CHLOROFORMATE	6.1		III	Category A SW1 H1 H2	

UN Number	PROPER SHIPPING NAME (Note: When there is more than one packing group or PSN the UN No. has been annotated with a, b, c)	Class or division	Subsidiary risk(s)	Packing Group	Stowage and Handling	Segregation
2748	2-ETHYLHEXYL CHLOROFORMATE	6.1	8	II	Category A SW1 SW2 H1 H2	
2749	TETRAMETHYLSILANE	3		I	Category D	
2750	1,3-DICHLOROPROPANOL-2	6.1		II	Category A SW1 SW2 H2	
2751	DIETHYLTHIOPHOSPHORYL CHLORIDE	8		II	Category D SW1 SW2 H2	
2752	1,2-EPOXY-3-ETHOXYPROPANE	3		III	Category A	
2753	N-ETHYLBENZYL TOLUIDINES, LIQUID	6.1		III	Category A	
2754	N-ETHYL TOLUIDINES	6.1		II	Category A	
2757	CARBAMATE PESTICIDE, SOLID, TOXIC	6.1		I	Category A SW2	
2757	CARBAMATE PESTICIDE, SOLID, TOXIC	6.1		II	Category A SW2	
2757	CARBAMATE PESTICIDE, SOLID, TOXIC	6.1		III	Category A SW2	
2758	CARBAMATE PESTICIDE, LIQUID, FLAMMABLE, TOXIC flashpoint less than 23°C	3	6.1	I	Category B SW2	
2758	CARBAMATE PESTICIDE, LIQUID, FLAMMABLE, TOXIC flashpoint less than 23°C	3	6.1	II	Category B SW2	
2759	ARSENICAL PESTICIDE, SOLID, TOXIC	6.1		I	Category A SW2	
2759	ARSENICAL PESTICIDE, SOLID, TOXIC	6.1		II	Category A SW2	
2759	ARSENICAL PESTICIDE, SOLID, TOXIC	6.1		III	Category A SW2	
2760	ARSENICAL PESTICIDE, LIQUID, FLAMMABLE, TOXIC flashpoint less than 23°C	3	6.1	I	Category B SW2	
2760	ARSENICAL PESTICIDE, LIQUID, FLAMMABLE, TOXIC flashpoint less than 23°C	3	6.1	II	Category B SW2	
2761	ORGANOCHLORINE PESTICIDE, SOLID, TOXIC	6.1		I	Category A SW2	
2761	ORGANOCHLORINE PESTICIDE, SOLID, TOXIC	6.1		II	Category A SW2	
2761	ORGANOCHLORINE PESTICIDE, SOLID, TOXIC	6.1		III	Category A SW2	
2762	ORGANOCHLORINE PESTICIDE, LIQUID, FLAMMABLE, TOXIC flashpoint less than 23°C	3	6.1	I	Category B SW2	
2762	ORGANOCHLORINE PESTICIDE, LIQUID, FLAMMABLE, TOXIC flashpoint less than 23°C	3	6.1	II	Category B SW2	
2763	TRIAZINE PESTICIDE, SOLID, TOXIC	6.1		I	Category A SW2	
2763	TRIAZINE PESTICIDE, SOLID, TOXIC	6.1		II	Category A SW2	
2763	TRIAZINE PESTICIDE, SOLID, TOXIC	6.1		III	Category A SW2	
2764	TRIAZINE PESTICIDE, LIQUID, FLAMMABLE, TOXIC flashpoint less than 23°C	3	6.1	I	Category B SW2	
2764	TRIAZINE PESTICIDE, LIQUID, FLAMMABLE, TOXIC flashpoint less than 23°C	3	6.1	II	Category B SW2	

UN Number	PROPER SHIPPING NAME (Note: When there is more than one packing group or PSN the UN No. has been annotated with a, b, c)	Class or division	Subsidiary risk(s)	Packing Group	Stowage and Handling	Segregation
2771	THIOCARBAMATE PESTICIDE, SOLID, TOXIC	6.1		I	Category A SW2	
2771	THIOCARBAMATE PESTICIDE, SOLID, TOXIC	6.1		II	Category A SW2	
2771	THIOCARBAMATE PESTICIDE, SOLID, TOXIC	6.1		III	Category A SW2	
2772	THIOCARBAMATE PESTICIDE, LIQUID, FLAMMABLE, TOXIC flashpoint less than 23°C	3	6.1	I	Category B SW2	
2772	THIOCARBAMATE PESTICIDE, LIQUID, FLAMMABLE, TOXIC flashpoint less than 23°C	3	6.1	II	Category B SW2	
2775	COPPER BASED PESTICIDE, SOLID, TOXIC	6.1		I	Category A SW2	
2775	COPPER BASED PESTICIDE, SOLID, TOXIC	6.1		II	Category A SW2	
2775	COPPER BASED PESTICIDE, SOLID, TOXIC	6.1		III	Category A SW2	
2776	COPPER BASED PESTICIDE, LIQUID, FLAMMABLE, TOXIC flashpoint less than 23°C	3	6.1	I	Category B SW2	
2776	COPPER BASED PESTICIDE, LIQUID, FLAMMABLE, TOXIC flashpoint less than 23°C	3	6.1	II	Category B SW2	
2777	MERCURY BASED PESTICIDE, SOLID, TOXIC	6.1	P	I	Category A SW2	
2777	MERCURY BASED PESTICIDE, SOLID, TOXIC	6.1	P	II	Category A SW2	
2777	MERCURY BASED PESTICIDE, SOLID, TOXIC	6.1	P	III	Category A SW2	
2778	MERCURY BASED PESTICIDE, LIQUID, FLAMMABLE, TOXIC flashpoint less than 23°C	3	6.1P	I	Category B SW2	
2778	MERCURY BASED PESTICIDE, LIQUID, FLAMMABLE, TOXIC flashpoint less than 23°C	3	6.1P	II	Category B SW2	
2779	SUBSTITUTED NITROPHENOL PESTICIDE, SOLID, TOXIC	6.1		I	Category A SW2	
2779	SUBSTITUTED NITROPHENOL PESTICIDE, SOLID, TOXIC	6.1		II	Category A SW2	
2779	SUBSTITUTED NITROPHENOL PESTICIDE, SOLID, TOXIC	6.1		III	Category A SW2	
2780	SUBSTITUTED NITROPHENOL PESTICIDE, LIQUID, FLAMMABLE, TOXIC flashpoint less than 23°C	3	6.1	I	Category B SW2	
2780	SUBSTITUTED NITROPHENOL PESTICIDE, LIQUID, FLAMMABLE, TOXIC flashpoint less than 23°C	3	6.1	II	Category B SW2	
2781	BIPYRIDILIUM PESTICIDE, SOLID, TOXIC	6.1		I	Category A SW2	
2781	BIPYRIDILIUM PESTICIDE, SOLID, TOXIC	6.1		II	Category A SW2	
2781	BIPYRIDILIUM PESTICIDE, SOLID, TOXIC	6.1		III	Category A SW2	
2782	BIPYRIDILIUM PESTICIDE, LIQUID, FLAMMABLE, TOXIC flashpoint less than 23°C	3	6.1	I	Category B SW2	
2782	BIPYRIDILIUM PESTICIDE, LIQUID, FLAMMABLE, TOXIC flashpoint less than 23°C	3	6.1	II	Category B SW2	
2783	ORGANOPHOSPHORUS PESTICIDE, SOLID, TOXIC	6.1		I	Category A SW2	
2783	ORGANOPHOSPHORUS PESTICIDE, SOLID, TOXIC	6.1		II	Category A SW2	

UN Number	PROPER SHIPPING NAME (Note: When there is more than one packing group or PSN the UN No. has been annotated with a, b, c)	Class or division	Subsidiary risk(s)	Packing Group	Stowage and Handling	Segregation
2783	ORGANOPHOSPHORUS PESTICIDE, SOLID, TOXIC	6.1		III	Category A SW2	
2784	ORGANOPHOSPHORUS PESTICIDE, LIQUID, FLAMMABLE, TOXIC flashpoint less than 23°C	3	6.1	I	Category B SW2	
2784	ORGANOPHOSPHORUS PESTICIDE, LIQUID, FLAMMABLE, TOXIC flashpoint less than 23°C	3	6.1	II	Category B SW2	
2785	4-THIAPENTANAL	6.1		III	Category D SW1	SG20 SG21
2786	ORGANOTIN PESTICIDE, SOLID, TOXIC	6.1	P	I	Category A SW2	
2786	ORGANOTIN PESTICIDE, SOLID, TOXIC	6.1	P	II	Category A SW2	
2786	ORGANOTIN PESTICIDE, SOLID, TOXIC	6.1	P	III	Category A SW2	
2787	ORGANOTIN PESTICIDE, LIQUID, FLAMMABLE, TOXIC flashpoint less than 23°C	3	6.1P	I	Category B SW2	
2787	ORGANOTIN PESTICIDE, LIQUID, FLAMMABLE, TOXIC flashpoint less than 23°C	3	6.1P	II	Category B SW2	
2788	ORGANOTIN COMPOUND, LIQUID, N.O.S.	6.1	P	I	Category A SW2	
2788	ORGANOTIN COMPOUND, LIQUID, N.O.S.	6.1	P	II	Category A SW2	
2788	ORGANOTIN COMPOUND, LIQUID, N.O.S.	6.1	P	III	Category A SW2	
2789	ACETIC ACID, GLACIAL or ACETIC ACID SOLUTION, more than 80% acid, by mass	8	3	II	Category A	
2790	ACETIC ACID SOLUTION not less than 50% but not more than 80% acid, by mass	8		II	Category A	
2790	ACETIC ACID SOLUTION more than 10% and less than 50% acid, by mass	8		III	Category A	
2793	FERROUS METAL BORINGS, SHAVINGS, TURNINGS, or CUTTINGS in a form liable to self-heating	4.2		III	Category A	
2794	BATTERIES, WET, FILLED WITH ACID electric storage	8			Category A SW16	
2795	BATTERIES, WET, FILLED WITH ALKALI electric storage	8			Category A SW16	SG35
2796	SULPHURIC ACID with not more than 51% acid or BATTERY FLUID, ACID	8		II	Category B	
2797	BATTERY FLUID, ALKALI	8		II	Category A	SG22 SG35
2798	PHENYLPHOSPHORUS DICHLORIDE	8		II	Category B SW2	
2799	PHENYLPHOSPHORUS THIODICHLORIDE	8		II	Category B SW2	
2800	BATTERIES, WET, NON-SPILLABLE electric storage	8			Category A	
2801	DYE, LIQUID, CORROSIVE, N.O.S. or DYE INTERMEDIATE, LIQUID, CORROSIVE, N.O.S.	8		I	Category A	
2801	DYE, LIQUID, CORROSIVE, N.O.S. or DYE INTERMEDIATE, LIQUID, CORROSIVE, N.O.S.	8		II	Category A	
2801	DYE, LIQUID, CORROSIVE, N.O.S. or DYE INTERMEDIATE, LIQUID, CORROSIVE, N.O.S.	8		III	Category A	
2802	COPPER CHLORIDE	8	P	III	Category A	
2803	GALLIUM	8		III	Category B SW1	

UN Number	PROPER SHIPPING NAME (Note: When there is more than one packing group or PSN the UN No. has been annotated with a, b, c)	Class or division	Subsidiary risk(s)	Packing Group	Stowage and Handling	Segregation
2805	LITHIUM HYDRIDE, FUSED SOLID	4.3		II	Category E	SG35
2806	LITHIUM NITRIDE	4.3		I	Category E	
2807	MAGNETIZED MATERIAL	9		III	-	
2809	MERCURY	8	6.1	III	Category B SW2	SG24
2810	TOXIC LIQUID, ORGANIC, N.O.S.	6.1		I	Category B SW2	
2810	TOXIC LIQUID, ORGANIC, N.O.S.	6.1		II	Category B SW2	
2810	TOXIC LIQUID, ORGANIC, N.O.S.	6.1		III	Category A SW2	
2811	TOXIC SOLID, ORGANIC, N.O.S.	6.1		I	Category B	
2811	TOXIC SOLID, ORGANIC, N.O.S.	6.1		II	Category B	
2811	TOXIC SOLID, ORGANIC, N.O.S.	6.1		III	Category A	
2812	SODIUM ALUMINATE, SOLID	8			-	
2813	WATER-REACTIVE SOLID, N.O.S.	4.3		I	Category E SW2	
2813	WATER-REACTIVE SOLID, N.O.S.	4.3		II	Category E SW2	
2813	WATER-REACTIVE SOLID, N.O.S.	4.3		III	Category E SW2	
2814	INFECTIOUS SUBSTANCE, AFFECTING HUMANS	6.2			SW7	
2815	N-AMINOETHYLPIPERAZINE	8		III	Category A SW1 H2	
2817	AMMONIUM HYDROGEN DIFLUORIDE SOLUTION	8	6.1	II	Category B SW2	
2817	AMMONIUM HYDROGEN DIFLUORIDE SOLUTION	8	6.1	III	Category B SW2	
2818	AMMONIUM POLYSULPHIDE SOLUTION	8	6.1	II	Category B SW1 SW2 H2	SG35
2818	AMMONIUM POLYSULPHIDE SOLUTION	8	6.1	III	Category B SW1 SW2 H2	SG35
2819	AMYL ACID PHOSPHATE	8		III	Category A	
2820	BUTYRIC ACID	8		III	Category A SW1 H2	
2821	PHENOL SOLUTION	6.1		II	Category A	
2821	PHENOL SOLUTION	6.1		III	Category A	
2822	2-CHLOROPYRIDINE	6.1		II	Category A SW2	
2823	CROTONIC ACID, SOLID	8		III	Category A SW1 H2	
2826	ETHYL CHLOROTHIOFORMATE	8	3P	II	Category A SW2	
2829	CAPROIC ACID	8		III	Category A	
2830	LITHIUM FERROSILICON	4.3		II	Category E SW2 SW5 H1	
2831	1,1,1-TRICHLOROETHANE	6.1		III	Category A SW2	
2834	PHOSPHOROUS ACID	8		III	Category A SW1	



UN Number	PROPER SHIPPING NAME (Note: When there is more than one packing group or PSN the UN No. has been annotated with a, b, c)	Class or division	Subsidiary risk(s)	Packing Group	Stowage and Handling	Segregation
2835	SODIUM ALUMINIUM HYDRIDE	4.3		II	Category E	SG35
2837	BISULPHATES, AQUEOUS SOLUTION	8		II	Category A	
2837	BISULPHATES, AQUEOUS SOLUTION	8		III	Category A	
2838	VINYL BUTYRATE, STABILIZED	3		II	Category B	
2839	ALDOL	6.1		II	Category A SW1 H2	
2840	BUTYRALDOXIME	3		III	Category A	
2841	DI-n-AMYLAMINE	3	6.1	III	Category A	
2842	NITROETHANE	3		III	Category A	
2844	CALCIUM MANGANESE SILICON	4.3		III	Category A SW5 H1	SG35
2845	PYROPHORIC LIQUID, ORGANIC, N.O.S.	4.2		I	Category D	SG63
2846	PYROPHORIC SOLID, ORGANIC, N.O.S.	4.2		I	Category D	
2849	3-CHLOROPROPANOL-1	6.1		III	Category A	
2850	PROPYLENE TETRAMER	3		III	Category A	
2851	BORON TRIFLUORIDE DIHYDRATE	8		II	Category B SW1 SW2 H2	
2852	DIPICRYL SULPHIDE, WETTED with not less than 10% water, by mass	4.1		I	Category D	SG7 SG30
2853	MAGNESIUM FLUOROSILICATE	6.1		III	Category A	SG35
2854	AMMONIUM FLUOROSILICATE	6.1		III	Category A	SG35
2855	ZINC FLUOROSILICATE	6.1		III	Category A	SG35
2856	FLUOROSILICATES, N.O.S.	6.1		III	Category A	SG35
2857	REFRIGERATING MACHINES containing non-flammable, non-toxic gases or ammonia solution (UN2672)	2.2			Category A	
2858	ZIRCONIUM, DRY coiled wire, finished metal sheets, strip (thinner than 254 microns but not thinner than 18 microns)	4.1		III	Category A	
2859	AMMONIUM METAVANADATE	6.1		II	Category A	SG6 SG8 SG10 SG12
2861	AMMONIUM POLYVANADATE	6.1		II	Category A	SG6 SG8 SG10 SG12
2862	VANADIUM PENTOXIDE, non-fused form	6.1		III	Category A	
2863	SODIUM AMMONIUM VANADATE	6.1		II	Category A	
2864	POTASSIUM METAVANADATE	6.1		II	Category A	
2865	HYDROXYLAMINE SULPHATE	8		III	Category A	
2869	TITANIUM TRICHLORIDE MIXTURE	8		II	Category A SW2	
2869	TITANIUM TRICHLORIDE MIXTURE	8		III	Category A SW2	
2870	ALUMINIUM BOROXYDRIDE	4.2	4.3	I	Category D	
2870	ALUMINIUM BOROXYDRIDE IN DEVICES	4.2	4.3	I	Category D	
2871	ANTIMONY POWDER	6.1		III	Category A	
2872	DIBROMOCHLOROPROPANES	6.1		II	Category A	
2872	DIBROMOCHLOROPROPANES	6.1		III	Category A	

UN Number	PROPER SHIPPING NAME (Note: When there is more than one packing group or PSN the UN No. has been annotated with a, b, c)	Class or division	Subsidiary risk(s)	Packing Group	Stowage and Handling	Segregation
2873	N,N-DI-n-BUTYLAMINOETHANOL	6.1		III	Category A	
2874	FURFURYL ALCOHOL	6.1		III	Category A	SG17 SG35
2875	HEXACHLOROPHENE	6.1		III	Category A	
2876	RESORCINOL	6.1		III	Category A	
2878	TITANIUM, SPONGE GRANULES or TITANIUM, SPONGE POWDERS	4.1		III	Category D	SG17
2879	SELENIUM OXYCHLORIDE	8	6.1	I	Category E SW2	
2880	CALCIUM HYPOCHLORITE, HYDRATED or CALCIUM HYPOCHLORITE, HYDRATED MIXTURE with not less than 5.5% but not more than 16% water	5.1		II	Category D SW1 SW11	SG35 SG38 SG49 SG53 SG60
2880	CALCIUM HYPOCHLORITE, HYDRATED or CALCIUM HYPOCHLORITE, HYDRATED MIXTURE with not less than 5.5% but not more than 16% water	5.1		III	Category D SW1 SW11	SG35 SG38 SG49 SG53 SG60
2881	METAL CATALYST, DRY	4.2		I	Category C	
2881	METAL CATALYST, DRY	4.2		II	Category C	
2881	METAL CATALYST, DRY	4.2		III	Category C	
2900	INFECTIOUS SUBSTANCE, AFFECTING ANIMALS only	6.2			SW7	
2901	BROMINE CHLORIDE	2.3	5.1/8		Category D SW2	SG6 SG19
2902	PESTICIDE, LIQUID, TOXIC, N.O.S.	6.1		I	Category B SW2	
2902	PESTICIDE, LIQUID, TOXIC, N.O.S.	6.1		II	Category B SW2	
2902	PESTICIDE, LIQUID, TOXIC, N.O.S.	6.1		III	Category A SW2	
2903	PESTICIDE, LIQUID, TOXIC, FLAMMABLE, N.O.S. flashpoint not less than 23°C	6.1	3	I	Category B SW2	
2903	PESTICIDE, LIQUID, TOXIC, FLAMMABLE, N.O.S. flashpoint not less than 23°C	6.1	3	II	Category B SW2	
2903	PESTICIDE, LIQUID, TOXIC, FLAMMABLE, N.O.S. flashpoint not less than 23°C	6.1	3	III	Category A SW2	
2904	CHLOROPHENOLATES, LIQUID or PHENOLATES, LIQUID	8		III	Category A	
2905	CHLOROPHENOLATES, SOLID or PHENOLATES, SOLID	8		III	Category A	
2907	ISOSORBIDE DINITRATE MIXTURE with not less than 60% lactose, mannose, starch, or calcium	4.1		II	Category E	SG7 SG30
2908	RADIOACTIVE MATERIAL, EXCEPTED PACKAGE - EMPTY PACKAGING	7	See SP290		Category A	
2909	RADIOACTIVE MATERIAL, EXCEPTED PACKAGE - ARTICLES MANUFACTURED FROM NATURAL URANIUM or D	7	See SP290		Category A	
2910	RADIOACTIVE MATERIAL, EXCEPTED PACKAGE - LIMITED QUANTITY OF MATERIAL	7	See SP290		Category A	
2911	RADIOACTIVE MATERIAL, EXCEPTED PACKAGE - INSTRUMENTS or ARTICLES	7	See SP290		Category A	
2912	RADIOACTIVE MATERIAL, LOW SPECIFIC ACTIVITY (LSA-I), non fissile or fissile-excepted	7	See SP172		Category A SW20	

UN Number	PROPER SHIPPING NAME (Note: When there is more than one packing group or PSN the UN No. has been annotated with a, b, c)	Class or division	Subsidiary risk(s)	Packing Group	Stowage and Handling	Segregation
2913	RADIOACTIVE MATERIAL, SURFACE CONTAMINATED OBJECTS( SCO-I or SCO-II), non fissile or fis	7	See SP172		Category A	
2915	RADIOACTIVE MATERIAL, TYPE A PACKAGE, non-special form, non fissile or fissile-excepted	7	See SP172		Category A SW20 SW21	
2916	RADIOACTIVE MATERIAL, TYPE B(U) PACKAGE, non fissile or fissile-excepted	7	See SP172		Category A SW12	
2917	RADIOACTIVE MATERIAL, TYPE B(M) PACKAGE, non fissile or fissile-excepted	7	See SP172		Category A SW12	
2919	RADIOACTIVE MATERIAL TRANSPORTED UNDER SPECIAL ARRANGEMENT, non fissile or fissile-excep	7	See SP172		Category A SW13	
2920	CORROSIVE LIQUID, FLAMMABLE, N.O.S.	8	3	I	Category C SW1 SW2	
2920	CORROSIVE LIQUID, FLAMMABLE, N.O.S.	8	3	II	Category C SW1 SW2	
2921	CORROSIVE SOLID, FLAMMABLE, N.O.S.	8	4.1	I	Category B SW1 H2	
2921	CORROSIVE SOLID, FLAMMABLE, N.O.S.	8	4.1	II	Category B SW1 H2	
2922	CORROSIVE LIQUID, TOXIC, N.O.S.	8	6.1	I	Category B SW2	
2922	CORROSIVE LIQUID, TOXIC, N.O.S.	8	6.1	II	Category B SW2	
2922	CORROSIVE LIQUID, TOXIC, N.O.S.	8	6.1	III	Category B SW2	
2923	CORROSIVE SOLID, TOXIC, N.O.S.	8	6.1	I	Category B SW2	
2923	CORROSIVE SOLID, TOXIC, N.O.S.	8	6.1	II	Category B SW2	
2923	CORROSIVE SOLID, TOXIC, N.O.S.	8	6.1	III	Category B SW2	
2924	FLAMMABLE LIQUID, CORROSIVE, N.O.S.	3	8	I	Category E SW2	
2924	FLAMMABLE LIQUID, CORROSIVE, N.O.S.	3	8	II	Category B SW2	
2924	FLAMMABLE LIQUID, CORROSIVE, N.O.S.	3	8	III	Category A SW2	
2925	FLAMMABLE SOLID, CORROSIVE, ORGANIC, N.O.S.	4.1	8	II	Category D SW2	
2925	FLAMMABLE SOLID, CORROSIVE, ORGANIC, N.O.S.	4.1	8	III	Category D SW2	
2926	FLAMMABLE SOLID, TOXIC, ORGANIC, N.O.S.	4.1	6.1	II	Category B SW2	
2926	FLAMMABLE SOLID, TOXIC, ORGANIC, N.O.S.	4.1	6.1	III	Category B SW2	
2927	TOXIC LIQUID, CORROSIVE, ORGANIC, N.O.S.	6.1	8	I	Category B SW2	
2927	TOXIC LIQUID, CORROSIVE, ORGANIC, N.O.S.	6.1	8	II	Category B SW2	
2928	TOXIC SOLID, CORROSIVE, ORGANIC, N.O.S.	6.1	8	I	Category B SW2	
2928	TOXIC SOLID, CORROSIVE, ORGANIC, N.O.S.	6.1	8	II	Category B SW2	



UN Number	PROPER SHIPPING NAME (Note: When there is more than one packing group or PSN the UN No. has been annotated with a, b, c)	Class or division	Subsidiary risk(s)	Packing Group	Stowage and Handling	Segregation
2929	TOXIC LIQUID, FLAMMABLE, ORGANIC, N.O.S.	6.1	3	I	Category B SW2	
2929	TOXIC LIQUID, FLAMMABLE, ORGANIC, N.O.S.	6.1	3	II	Category B SW2	
2930	TOXIC SOLID, FLAMMABLE, ORGANIC, N.O.S.	6.1	4.1	I	Category B	
2930	TOXIC SOLID, FLAMMABLE, ORGANIC, N.O.S.	6.1	4.1	II	Category B	
2931	VANADYL SULPHATE	6.1		II	Category A	
2933	METHYL 2-CHLOROPROPIONATE	3		III	Category A	
2934	ISOPROPYL 2-CHLOROPROPIONATE	3		III	Category A	
2935	ETHYL 2-CHLOROPROPIONATE	3		III	Category A	
2936	THIOLACTIC ACID	6.1		II	Category A	
2937	alpha-METHYLBENZYL ALCOHOL, LIQUID	6.1		III	Category A	
2940	9-PHOSPHABICYCLONONANES (CYCLOOCTADIENE PHOSPHINES)	4.2		II	Category A	
2941	FLUOROANILINES	6.1		III	Category A	
2942	2-TRIFLUOROMETHYLANILINE	6.1		III	Category A	
2943	TETRAHYDROFURFURYLAMINE	3		III	Category A	
2945	N-METHYLBUTYLAMINE	3	8	II	Category B SW2	
2946	2-AMINO-5-DIETHYLAMINOPENTANE	6.1		III	Category A	
2947	ISOPROPYL CHLOROACETATE	3		III	Category A	
2948	3-TRIFLUOROMETHYLANILINE	6.1		II	Category A SW2	
2949	SODIUM HYDROSULPHIDE, HYDRATED with not less than 25% water of crystallization	8		II	Category A	SG35
2950	MAGNESIUM GRANULES, COATED particle size not less than 149 microns	4.3		III	Category A	SG35
2956	5-tert-BUTYL-2,4,6-TRINITRO-m-XYLENE (MUSK XYLENE)	4.1		III	Category D SW1 SW2 H2 H3	SG1
2965	BORON TRIFLUORIDE DIMETHYL ETHERATE	4.3	"3/8	I	Category D SW2	SG5 SG7 SG8 SG13
2966	THIOGLYCOL	6.1		II	Category A	
2967	SULPHAMIC ACID	8		III	Category A	
2968	MANEB, STABILIZED or MANEB PREPARATION, STABILIZED against self-heating	4.3		III	Category B	SG29 SG35
2969	CASTOR BEANS or CASTOR MEAL or CASTOR POMACE or CASTOR FLAKE	9		II	Category E SW2	SG10 SG18 SG29
2977	RADIOACTIVE MATERIAL, URANIUM HEXAFLUORIDE, FISSILE	7	8		Category A SW12	
2978	RADIOACTIVE MATERIAL, URANIUM HEXAFLUORIDE non fissile or fissile-excepted	7	8		Category A SW12	
2983	ETHYLENE OXIDE AND PROPYLENE OXIDE MIXTURE with not more than 30% ethylene oxide	3	6.1	I	Category E SW2	
2984	HYDROGEN PEROXIDE, AQUEOUS SOLUTION with not less than 8% but less than 20% hydrogen peroxide (stabilized as necessary)	5.1		III	Category B SW1	SG16 SG59 SG72

UN Number	PROPER SHIPPING NAME (Note: When there is more than one packing group or PSN the UN No. has been annotated with a, b, c)	Class or division	Subsidiary risk(s)	Packing Group	Stowage and Handling	Segregation
2985	CHLOROSILANES, FLAMMABLE, CORROSIVE, N.O.S.	3	8	II	Category B SW2	
2986	CHLOROSILANES, CORROSIVE, FLAMMABLE, N.O.S.	8	3	II	Category C SW2	
2987	CHLOROSILANES, CORROSIVE, N.O.S.	8		II	Category C SW2	
2988	CHLOROSILANES, WATER-REACTIVE, FLAMMABLE, CORROSIVE, N.O.S.	4.3	"3/8	I	Category D SW2	SG5 SG7 SG8 SG13
2989	LEAD PHOSPHITE, DIBASIC	4.1		II	Category B	SG29
2989	LEAD PHOSPHITE, DIBASIC	4.1		III	Category B	SG29
2990	LIFE-SAVING APPLIANCES, SELF-INFLATING	9			Category A	SG18 SG71
2991	CARBAMATE PESTICIDE, LIQUID, TOXIC, FLAMMABLE, flashpoint not less than 23°C	6.1	3	I	Category B SW2	
2991	CARBAMATE PESTICIDE, LIQUID, TOXIC, FLAMMABLE, flashpoint not less than 23°C	6.1	3	II	Category B SW2	
2991	CARBAMATE PESTICIDE, LIQUID, TOXIC, FLAMMABLE, flashpoint not less than 23°C	6.1	3	III	Category A SW2	
2992	CARBAMATE PESTICIDE, LIQUID, TOXIC	6.1		I	Category B SW2	
2992	CARBAMATE PESTICIDE, LIQUID, TOXIC	6.1		II	Category B SW2	
2992	CARBAMATE PESTICIDE, LIQUID, TOXIC	6.1		III	Category A SW2	
2993	ARSENICAL PESTICIDE, LIQUID, TOXIC, FLAMMABLE flashpoint not less than 23°C	6.1	3	I	Category B SW2	
2993	ARSENICAL PESTICIDE, LIQUID, TOXIC, FLAMMABLE flashpoint not less than 23°C	6.1	3	II	Category B SW2	
2993	ARSENICAL PESTICIDE, LIQUID, TOXIC, FLAMMABLE flashpoint not less than 23°C	6.1	3	III	Category A SW2	
2994	ARSENICAL PESTICIDE, LIQUID, TOXIC	6.1		I	Category B SW2	
2994	ARSENICAL PESTICIDE, LIQUID, TOXIC	6.1		II	Category B SW2	
2994	ARSENICAL PESTICIDE, LIQUID, TOXIC	6.1		III	Category A SW2	
2995	ORGANOCHLORINE PESTICIDE, LIQUID, TOXIC, FLAMMABLE flashpoint not less than 23°C	6.1	3	I	Category B SW2	
2995	ORGANOCHLORINE PESTICIDE, LIQUID, TOXIC, FLAMMABLE flashpoint not less than 23°C	6.1	3	II	Category B SW2	
2995	ORGANOCHLORINE PESTICIDE, LIQUID, TOXIC, FLAMMABLE flashpoint not less than 23°C	6.1	3	III	Category A SW2	
2996	ORGANOCHLORINE PESTICIDE, LIQUID, TOXIC	6.1		I	Category B SW2	
2996	ORGANOCHLORINE PESTICIDE, LIQUID, TOXIC	6.1		II	Category B SW2	
2996	ORGANOCHLORINE PESTICIDE, LIQUID, TOXIC	6.1		III	Category A SW2	
2997	TRIAZINE PESTICIDE, LIQUID, TOXIC, FLAMMABLE, flashpoint not less than 23°C	6.1	3	I	Category B SW2	
2997	TRIAZINE PESTICIDE, LIQUID, TOXIC, FLAMMABLE, flashpoint not less than 23°C	6.1	3	II	Category B SW2	

UN Number	PROPER SHIPPING NAME (Note: When there is more than one packing group or PSN the UN No. has been annotated with a, b, c)	Class or division	Subsidiary risk(s)	Packing Group	Stowage and Handling	Segregation
2997	TRIAZINE PESTICIDE, LIQUID, TOXIC, FLAMMABLE, flashpoint not less than 23°C	6.1	3	III	Category A SW2	
2998	TRIAZINE PESTICIDE, LIQUID, TOXIC	6.1		I	Category B SW2	
2998	TRIAZINE PESTICIDE, LIQUID, TOXIC	6.1		II	Category B SW2	
2998	TRIAZINE PESTICIDE, LIQUID, TOXIC	6.1		III	Category A SW2	
3005	THIOCARBAMATE PESTICIDE, LIQUID, TOXIC, FLAMMABLE flashpoint not less than 23°C	6.1	3	I	Category B SW2	
3005	THIOCARBAMATE PESTICIDE, LIQUID, TOXIC, FLAMMABLE flashpoint not less than 23°C	6.1	3	II	Category B SW2	
3005	THIOCARBAMATE PESTICIDE, LIQUID, TOXIC, FLAMMABLE flashpoint not less than 23°C	6.1	3	III	Category A SW2	
3006	THIOCARBAMATE PESTICIDE, LIQUID, TOXIC	6.1		I	Category B SW2	
3006	THIOCARBAMATE PESTICIDE, LIQUID, TOXIC	6.1		II	Category B SW2	
3006	THIOCARBAMATE PESTICIDE, LIQUID, TOXIC	6.1		III	Category A SW2	
3009	COPPER BASED PESTICIDE, LIQUID, TOXIC, FLAMMABLE flashpoint not less than 23°C	6.1		I	Category B SW2	
3009	COPPER BASED PESTICIDE, LIQUID, TOXIC, FLAMMABLE flashpoint not less than 23°C	6.1	3	II	Category B SW2	
3009	COPPER BASED PESTICIDE, LIQUID, TOXIC, FLAMMABLE flashpoint not less than 23°C	6.1	3	III	Category A SW2	
3010	COPPER BASED PESTICIDE, LIQUID, TOXIC	6.1		I	Category B SW2	
3010	COPPER BASED PESTICIDE, LIQUID, TOXIC	6.1		II	Category B SW2	
3010	COPPER BASED PESTICIDE, LIQUID, TOXIC	6.1		III	Category A SW2	
3011	MERCURY BASED PESTICIDE, LIQUID, TOXIC, FLAMMABLE flashpoint not less than 23°C	6.1	3P	I	Category B SW2	
3011	MERCURY BASED PESTICIDE, LIQUID, TOXIC, FLAMMABLE flashpoint not less than 23°C	6.1	3P	II	Category B SW2	
3011	MERCURY BASED PESTICIDE, LIQUID, TOXIC, FLAMMABLE flashpoint not less than 23°C	6.1	3P	III	Category A SW2	
3012	MERCURY BASED PESTICIDE, LIQUID, TOXIC	6.1	P	I	Category B SW2	
3012	MERCURY BASED PESTICIDE, LIQUID, TOXIC	6.1	P	II	Category B SW2	
3012	MERCURY BASED PESTICIDE, LIQUID, TOXIC	6.1	P	III	Category A SW2	
3013	SUBSTITUTED NITROPHENOL PESTICIDE, LIQUID, TOXIC, FLAMMABLE flashpoint not less than 23°	6.1	3	I	Category B SW2	
3013	SUBSTITUTED NITROPHENOL PESTICIDE, LIQUID, TOXIC, FLAMMABLE flashpoint not less than 23°	6.1	3	II	Category B SW2	
3013	SUBSTITUTED NITROPHENOL PESTICIDE, LIQUID, TOXIC, FLAMMABLE flashpoint not less than 23°	6.1	3	III	Category A SW2	
3014	SUBSTITUTED NITROPHENOL PESTICIDE, LIQUID, TOXIC	6.1		I	Category B SW2	
3014	SUBSTITUTED NITROPHENOL PESTICIDE, LIQUID, TOXIC	6.1		II	Category B SW2	

UN Number	PROPER SHIPPING NAME (Note: When there is more than one packing group or PSN the UN No. has been annotated with a, b, c)	Class or division	Subsidiary risk(s)	Packing Group	Stowage and Handling	Segregation
3014	SUBSTITUTED NITROPHENOL PESTICIDE, LIQUID, TOXIC	6.1		III	Category A SW2	
3015	BIPYRIDILIUM PESTICIDE, LIQUID, TOXIC, FLAMMABLE flashpoint not less than 23°C	6.1		I	Category B SW2	
3015	BIPYRIDILIUM PESTICIDE, LIQUID, TOXIC, FLAMMABLE flashpoint not less than 23°C	6.1	3	II	Category B SW2	
3015	BIPYRIDILIUM PESTICIDE, LIQUID, TOXIC, FLAMMABLE flashpoint not less than 23°C	6.1	3	III	Category A SW2	
3016	BIPYRIDILIUM PESTICIDE, LIQUID, TOXIC	6.1		I	Category B SW2	
3016	BIPYRIDILIUM PESTICIDE, LIQUID, TOXIC	6.1		II	Category B SW2	
3016	BIPYRIDILIUM PESTICIDE, LIQUID, TOXIC	6.1		III	Category A SW2	
3017	ORGANOPHOSPHORUS PESTICIDE, LIQUID, TOXIC, FLAMMABLE flashpoint not less than 23°C	6.1	3	I	Category B SW2	
3017	ORGANOPHOSPHORUS PESTICIDE, LIQUID, TOXIC, FLAMMABLE flashpoint not less than 23°C	6.1	3	II	Category B SW2	
3017	ORGANOPHOSPHORUS PESTICIDE, LIQUID, TOXIC, FLAMMABLE flashpoint not less than 23°C	6.1	3	III	Category A SW2	
3018	ORGANOPHOSPHORUS PESTICIDE, LIQUID, TOXIC	6.1		I	Category B SW2	
3018	ORGANOPHOSPHORUS PESTICIDE, LIQUID, TOXIC	6.1		II	Category B SW2	
3018	ORGANOPHOSPHORUS PESTICIDE, LIQUID, TOXIC	6.1		III	Category A SW2	
3019	ORGANOTIN PESTICIDE, LIQUID, TOXIC, FLAMMABLE flashpoint not less than 23°C	6.1	3P	I	Category B SW2	
3019	ORGANOTIN PESTICIDE, LIQUID, TOXIC, FLAMMABLE flashpoint not less than 23°C	6.1	3P	II	Category B SW2	
3019	ORGANOTIN PESTICIDE, LIQUID, TOXIC, FLAMMABLE flashpoint not less than 23°C	6.1	3P	III	Category A SW2	
3020	ORGANOTIN PESTICIDE, LIQUID, TOXIC	6.1	P	I	Category B SW2	
3020	ORGANOTIN PESTICIDE, LIQUID, TOXIC	6.1	P	II	Category B SW2	
3020	ORGANOTIN PESTICIDE, LIQUID, TOXIC	6.1	P	III	Category A SW2	
3021	PESTICIDE, LIQUID, FLAMMABLE, TOXIC, N.O.S. flashpoint less than 23°C	3	6.1	I	Category B SW2	
3021	PESTICIDE, LIQUID, FLAMMABLE, TOXIC, N.O.S. flashpoint less than 23°C	3	6.1	II	Category B SW2	
3022	1,2-BUTYLENE OXIDE, STABILIZED	3		II	Category B	SG20 SG21
3023	2-METHYL-2-HEPTANETHIOL	6.1	3	I	Category D SW2	SG57
3024	COUMARIN DERIVATIVE PESTICIDE, LIQUID, FLAMMABLE, TOXIC, flashpoint less than 23°C	3	6.1	I	Category B SW2	
3024	COUMARIN DERIVATIVE PESTICIDE, LIQUID, FLAMMABLE, TOXIC, flashpoint less than 23°C	3	6.1	II	Category B SW2	
3025	COUMARIN DERIVATIVE PESTICIDE, LIQUID, TOXIC, FLAMMABLE flashpoint not less than 23°C	6.1	3	I	Category B SW2	

UN Number	PROPER SHIPPING NAME (Note: When there is more than one packing group or PSN the UN No. has been annotated with a, b, c)	Class or division	Subsidiary risk(s)	Packing Group	Stowage and Handling	Segregation
3025	COUMARIN DERIVATIVE PESTICIDE, LIQUID, TOXIC, FLAMMABLE flashpoint not less than 23°C	6.1	3	II	Category B SW2	
3025	COUMARIN DERIVATIVE PESTICIDE, LIQUID, TOXIC, FLAMMABLE flashpoint not less than 23°C	6.1	3	III	Category A SW2	
3026	COUMARIN DERIVATIVE PESTICIDE, LIQUID, TOXIC	6.1		I	Category B SW2	
3026	COUMARIN DERIVATIVE PESTICIDE, LIQUID, TOXIC	6.1		II	Category B SW2	
3026	COUMARIN DERIVATIVE PESTICIDE, LIQUID, TOXIC	6.1		III	Category A SW2	
3027	COUMARIN DERIVATIVE PESTICIDE, SOLID, TOXIC	6.1		I	Category A SW2	
3027	COUMARIN DERIVATIVE PESTICIDE, SOLID, TOXIC	6.1		II	Category A SW2	
3027	COUMARIN DERIVATIVE PESTICIDE, SOLID, TOXIC	6.1		III	Category A SW2	
3028	BATTERIES, DRY, CONTAINING POTASSIUM HYDROXIDE, SOLID electric storage	8		III	Category A	SG35
3048	ALUMINIUM PHOSPHIDE PESTICIDE	6.1		I	Category E SW2 SW5	
3054	CYCLOHEXANETHIOL (CYCLOHEXYL MERCAPTAN)	3		III	Category A SW2	SG50 SG57
3055	2-(2-AMINOETHOXY) ETHANOL	8	8	III	Category A	
3056	n-HEPTALDEHYDE	3		III	Category A	
3057	TRIFLUOROACETYL CHLORIDE	2.3	8		Category D SW2	
3064	NITROGLYCERIN SOLUTION IN ALCOHOL with more than 1% but not more than 5% nitroglycerin	3		II	Category E	
3065	ALCOHOLIC BEVERAGES, with more than 70% alcohol by volume	3		II	Category A	
3065	ALCOHOLIC BEVERAGES, with more than 24% but not more than 70% alcohol by volume	3		III	Category A	
3066	PAINT (including paint, lacquer, enamel, stain, shellac, varnish, polish, liquid filler)	8		II	Category B SW2	
3066	PAINT (including paint, lacquer, enamel, stain, shellac, varnish, polish, liquid filler)	8		III	Category A SW2	
3070	ETHYLENE OXIDE AND DICHLORODIFLUOROMETHANE MIXTURE with not more than 12.5% ethylene oxi	2.2			Category A	
3071	MERCAPTANS, LIQUID, TOXIC, FLAMMABLE, N.O.S. or MERCAPTAN MIXTURE, LIQUID, TOXIC, FLAMMA	6.1	3	II	Category C SW2	SG57
3072	LIFE-SAVING APPLIANCES, NOT SELF-INFLATING containing dangerous goods as equipment	9			Category A	SG18 SG71
3073	VINYLPYRIDINES, STABILIZED	6.1	"3/8	II	Category C SW2	SG5 SG8 SG35
3077	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.	9		III	Category A SW23	
3078	CERIUM turnings or gritty powder	4.3		II	Category E	SG35
3079	METHACRYLONITRILE, STABILIZED	6.1	3	I	Category D SW2	



UN Number	PROPER SHIPPING NAME (Note: When there is more than one packing group or PSN the UN No. has been annotated with a, b, c)	Class or division	Subsidiary risk(s)	Packing Group	Stowage and Handling	Segregation
3080	ISOCYANATES, TOXIC, FLAMMABLE, N.O.S or ISOCYANATE SOLUTION, TOXIC, FLAMMABLE, N.O.S.	6.1	3	II	Category D SW1 SW2	
3082	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.	9		III	Category A	
3083	PERCHLORYL FLUORIDE	2.3	5.1		Category D SW2	
3084	CORROSIVE SOLID, OXIDIZING, N.O.S.	8	5.1	I	Category C	
3084	CORROSIVE SOLID, OXIDIZING, N.O.S.	8	5.1	II	Category C	
3085	OXIDIZING SOLID, CORROSIVE, N.O.S.	5.1	8	I	Category D H1	SG38 SG49 SG60
3085	OXIDIZING SOLID, CORROSIVE, N.O.S.	5.1	8	II	Category B H1	SG38 SG49 SG60
3085	OXIDIZING SOLID, CORROSIVE, N.O.S.	5.1	8	III	Category B H1	SG38 SG49 SG60
3086	TOXIC SOLID, OXIDIZING, N.O.S.	6.1	5.1	I	Category C	
3086	TOXIC SOLID, OXIDIZING, N.O.S.	6.1	5.1	II	Category C	
3087	OXIDIZING SOLID, TOXIC, N.O.S.	5.1	5.1	I	Category D	SG38 SG49 SG60
3087	OXIDIZING SOLID, TOXIC, N.O.S.	5.1	6.1	II	Category B	SG38 SG49 SG60
3087	OXIDIZING SOLID, TOXIC, N.O.S.	5.1	6.1	III	Category B	SG38 SG49 SG60
3088	SELF-HEATING SOLID, ORGANIC, N.O.S.	4.2		II	Category C	
3088	SELF-HEATING SOLID, ORGANIC, N.O.S.	4.2		III	Category C	
3089	METAL POWDER, FLAMMABLE, N.O.S.	4.1		II	Category B	SG17
3089	METAL POWDER, FLAMMABLE, N.O.S.	4.1		III	Category B	SG17
3090	LITHIUM METAL BATTERIES (including lithium alloy batteries)	9		II	Category A	
3091	LITHIUM METAL BATTERIES CONTAINED IN EQUIPMENT or LITHIUM METAL BATTERIES PACKED WITH EQUIPMENT (including lithium alloy batteries)	9		II	Category A	
3092	1-METHOXY-2-PROPANOL	3		III	Category A	
3093	CORROSIVE LIQUID, OXIDIZING, N.O.S.	8	5.1	I	Category C	
3093	CORROSIVE LIQUID, OXIDIZING, N.O.S.	8	5.1	II	Category C	
3094	CORROSIVE LIQUID, WATER-REACTIVE, N.O.S.	8	4.3	I	Category D	
3094	CORROSIVE LIQUID, WATER-REACTIVE, N.O.S.	8	4.3	II	Category D	
3095	CORROSIVE SOLID, SELF-HEATING, N.O.S.	8	4.2	I	Category D	
3095	CORROSIVE SOLID, SELF-HEATING, N.O.S.	8	4.2	II	Category D	
3096	CORROSIVE SOLID, WATER-REACTIVE, N.O.S.	8	4.3	I	Category D	
3096	CORROSIVE SOLID, WATER-REACTIVE, N.O.S.	8	4.3	II	Category D	
3097	FLAMMABLE SOLID, OXIDIZING, N.O.S.	4.1	5.1	II	-	
3097	FLAMMABLE SOLID, OXIDIZING, N.O.S.	4.1	5.1	III	-	
3098	OXIDIZING LIQUID, CORROSIVE, N.O.S.	5.1	8	I	Category D H1	SG38 SG49 SG60

UN Number	PROPER SHIPPING NAME (Note: When there is more than one packing group or PSN the UN No. has been annotated with a, b, c)	Class or division	Subsidiary risk(s)	Packing Group	Stowage and Handling	Segregation
3098	OXIDIZING LIQUID, CORROSIVE, N.O.S.	5.1	8	II	Category B H1	SG38 SG49 SG60
3098	OXIDIZING LIQUID, CORROSIVE, N.O.S.	5.1	8	III	Category B H1	SG38 SG49 SG60
3099	OXIDIZING LIQUID, TOXIC, N.O.S.	5.1	6.1	I	Category D	SG38 SG49 SG60
3099	OXIDIZING LIQUID, TOXIC, N.O.S.	5.1	6.1	II	Category B	SG38 SG49 SG60
3099	OXIDIZING LIQUID, TOXIC, N.O.S.	5.1	6.1	III	Category B	SG38 SG49 SG60
3100	OXIDIZING SOLID, SELF-HEATING, N.O.S.	5.1	4.2	I	-	
3100	OXIDIZING SOLID, SELF-HEATING, N.O.S.	5.1	4.2	II	-	
3101	ORGANIC PEROXIDE TYPE B, LIQUID	5.2	See SP181		Category D SW1	SG1 SG35 SG36
3102	ORGANIC PEROXIDE TYPE B, SOLID	5.2	See SP181		Category D SW1	SG1 SG35 SG36
3103	ORGANIC PEROXIDE TYPE C, LIQUID	5.2			Category D SW1	SG35 SG36
3104	ORGANIC PEROXIDE TYPE C, SOLID	5.2			Category D SW1	SG35 SG36
3105	ORGANIC PEROXIDE TYPE D, LIQUID	5.2			Category D SW1	SG35 SG36 SG72
3106	ORGANIC PEROXIDE TYPE D, SOLID	5.2			Category D SW1	SG35 SG36
3107	ORGANIC PEROXIDE TYPE E, LIQUID	5.2			Category D SW1	SG35 SG36 SG72
3108	ORGANIC PEROXIDE TYPE E, SOLID	5.2			Category D SW1	SG35 SG36
3109	ORGANIC PEROXIDE TYPE F, LIQUID	5.2			Category D SW1	SG35 SG36 SG72
3110	ORGANIC PEROXIDE TYPE F, SOLID	5.2			Category D SW1	SG35 SG36
3111	ORGANIC PEROXIDE TYPE B, LIQUID, TEMPERATURE CONTROLLED	5.2			Category D SW1 SW3	SG1 SG35 SG36
3112	ORGANIC PEROXIDE TYPE B, SOLID, TEMPERATURE CONTROLLED	5.2	See SP181		Category D SW1 SW3	SG1 SG35 SG36
3113	ORGANIC PEROXIDE TYPE C, LIQUID, TEMPERATURE CONTROLLED	5.2			Category D SW1 SW3	SG35 SG36
3114	ORGANIC PEROXIDE TYPE C, SOLID, TEMPERATURE CONTROLLED	5.2			Category D SW1 SW3	SG35 SG36
3115	ORGANIC PEROXIDE TYPE D, LIQUID, TEMPERATURE CONTROLLED	5.2			Category D SW1 SW3	SG35 SG36
3116	ORGANIC PEROXIDE TYPE D, SOLID, TEMPERATURE CONTROLLED	5.2			Category D SW1 SW3	SG35 SG36
3117	ORGANIC PEROXIDE TYPE E, LIQUID, TEMPERATURE CONTROLLED	5.2			Category D SW1 SW3	SG35 SG36
3118	ORGANIC PEROXIDE TYPE E, SOLID, TEMPERATURE CONTROLLED	5.2			Category D SW1 SW3	SG35 SG36



UN Number	PROPER SHIPPING NAME (Note: When there is more than one packing group or PSN the UN No. has been annotated with a, b, c)	Class or division	Subsidiary risk(s)	Packing Group	Stowage and Handling	Segregation
3119	ORGANIC PEROXIDE TYPE F, LIQUID, TEMPERATURE CONTROLLED	5.2			Category D SW1 SW3	SG35 SG36
3120	ORGANIC PEROXIDE TYPE F, SOLID, TEMPERATURE CONTROLLED	5.2			Category D SW1 SW3	SG35 SG36
3121	OXIDIZING SOLID, WATER-REACTIVE, N.O.S.	5.1	4.3	I	-	
3121	OXIDIZING SOLID, WATER-REACTIVE, N.O.S.	5.1	4.3	II	-	
3122	TOXIC LIQUID, OXIDIZING, N.O.S.	6.1	5.1	I	Category C	
3122	TOXIC LIQUID, OXIDIZING, N.O.S.	6.1	5.1	II	Category C	
3123	TOXIC LIQUID, WATER-REACTIVE, N.O.S.	6.1	4.3	I	Category D SW2	
3123	TOXIC LIQUID, WATER-REACTIVE, N.O.S.	6.1	4.3	II	Category D SW2	
3124	TOXIC SOLID, SELF-HEATING, N.O.S.	6.1	4.2	I	Category D SW2	
3124	TOXIC SOLID, SELF-HEATING, N.O.S.	6.1	4.2	II	Category D SW2	
3125	TOXIC SOLID, WATER-REACTIVE, N.O.S.	6.1	4.3	I	Category D SW2	
3125	TOXIC SOLID, WATER-REACTIVE, N.O.S.	6.1	4.3	II	Category D SW2	
3126	SELF-HEATING SOLID, CORROSIVE, ORGANIC, N.O.S.	4.2	8	II	Category C	
3126	SELF-HEATING SOLID, CORROSIVE, ORGANIC, N.O.S.	4.2	8	III	Category C	
3127	SELF-HEATING SOLID, OXIDIZING, N.O.S.	4.2	5.1	II	-	
3127	SELF-HEATING SOLID, OXIDIZING, N.O.S.	4.2	5.1	III	-	
3128	SELF-HEATING SOLID, TOXIC, ORGANIC, N.O.S.	4.2	6.1	II	Category C	
3128	SELF-HEATING SOLID, TOXIC, ORGANIC, N.O.S.	4.2	6.1	III	Category C	
3129	WATER-REACTIVE LIQUID, CORROSIVE, N.O.S.	4.3	8	I	Category D	
3129	WATER-REACTIVE LIQUID, CORROSIVE, N.O.S.	4.3	8	II	Category E SW5	
3129	WATER-REACTIVE LIQUID, CORROSIVE, N.O.S.	4.3	8	III	Category E	
3130	WATER-REACTIVE LIQUID, TOXIC, N.O.S.	4.3	6.1	I	Category D	
3130	WATER-REACTIVE LIQUID, TOXIC, N.O.S.	4.3	6.1	II	Category E SW5	
3130	WATER-REACTIVE LIQUID, TOXIC, N.O.S.	4.3	6.1	III	Category E SW5	
3131	WATER-REACTIVE SOLID, CORROSIVE, N.O.S.	4.3	8	I	Category D	
3131	WATER-REACTIVE SOLID, CORROSIVE, N.O.S.	4.3	8	II	Category E SW5	
3131	WATER-REACTIVE SOLID, CORROSIVE, N.O.S.	4.3	8	III	Category E SW5	
3132	WATER-REACTIVE SOLID, FLAMMABLE, N.O.S.	4.3	4.1	I	-	
3132	WATER-REACTIVE SOLID, FLAMMABLE, N.O.S.	4.3	4.1	II	-	
3132	WATER-REACTIVE SOLID, FLAMMABLE, N.O.S.	4.3	5.1	III	-	
3133	WATER-REACTIVE SOLID, OXIDIZING, N.O.S.	4.3	5.1	II	-	
3133	WATER-REACTIVE SOLID, OXIDIZING, N.O.S.	4.3	5.1	III	-	
3134	WATER-REACTIVE SOLID, TOXIC, N.O.S.	4.3	6.1	I	Category D	
3134	WATER-REACTIVE SOLID, TOXIC, N.O.S.	4.3	6.1	II	Category E SW5	

UN Number	PROPER SHIPPING NAME (Note: When there is more than one packing group or PSN the UN No. has been annotated with a, b, c)	Class or division	Subsidiary risk(s)	Packing Group	Stowage and Handling	Segregation
3134	WATER-REACTIVE SOLID, TOXIC, N.O.S.	4.3	6.1	III	Category E SW5	
3135	WATER-REACTIVE SOLID, SELF-HEATING, N.O.S.	4.3	4.2	I	-	
3135	WATER-REACTIVE SOLID, SELF-HEATING, N.O.S.	4.3	4.2	II	-	
3135	WATER-REACTIVE SOLID, SELF-HEATING, N.O.S.	4.3	4.2	III	-	
3136	TRIFLUOROMETHANE, REFRIGERATED LIQUID	2.2			Category D	
3137	OXIDIZING SOLID, FLAMMABLE, N.O.S.	5.1	4.1	I	-	
3138	ETHYLENE, ACETYLENE AND PROPYLENE MIXTURE, REFRIGERATED LIQUID containing at least 71.5% ethylene, with not more than 22.5% acetylene and not more than 6% propylene	2.1			Category D SW2	SG46
3139	OXIDIZING LIQUID, N.O.S.	5.1		I	Category D	SG38 SG49 SG60
3139	OXIDIZING LIQUID, N.O.S.	5.1		II	Category B	SG38 SG49 SG60
3139	OXIDIZING LIQUID, N.O.S.	5.1		III	Category B	SG38 SG49 SG60
3140	ALKALOIDS, LIQUID, N.O.S. or ALKALOIDS SALTS, LIQUID, N.O.S.	6.1		I	Category A	
3140	ALKALOIDS, LIQUID, N.O.S. or ALKALOIDS SALTS, LIQUID, N.O.S.	6.1		II	Category A	
3140	ALKALOIDS, LIQUID, N.O.S. or ALKALOIDS SALTS, LIQUID, N.O.S.	6.1		III	Category A	
3141	ANTIMONY COMPOUND, INORGANIC, LIQUID, N.O.S.	6.1		III	Category A	
3142	DISINFECTANT, LIQUID, TOXIC, N.O.S.	6.1		I	Category A SW2	
3142	DISINFECTANT, LIQUID, TOXIC, N.O.S.	6.1		II	Category A SW2	
3142	DISINFECTANT, LIQUID, TOXIC, N.O.S.	6.1		III	Category A SW2	
3143	DYE, SOLID, TOXIC, N.O.S. or DYE INTERMEDIATE, SOLID, TOXIC, N.O.S.	6.1		I	Category A	
3143	DYE, SOLID, TOXIC, N.O.S. or DYE INTERMEDIATE, SOLID, TOXIC, N.O.S.	6.1		II	Category A	
3143	DYE, SOLID, TOXIC, N.O.S. or DYE INTERMEDIATE, SOLID, TOXIC, N.O.S.	6.1		III	Category A	
3144	NICOTINE COMPOUND, LIQUID, N.O.S. or NICOTINE PREPARATION, LIQUID, N.O.S.	6.1		I	Category B SW2	
3144	NICOTINE COMPOUND, LIQUID, N.O.S. or NICOTINE PREPARATION, LIQUID, N.O.S.	6.1		II	Category B SW2	
3144	NICOTINE COMPOUND, LIQUID, N.O.S. or NICOTINE PREPARATION, LIQUID, N.O.S.	6.1		III	Category B SW2	
3145	ALKYLPHENOLS, LIQUID, N.O.S. (including C2-C12 homologues)	8		I	Category B	
3145	ALKYLPHENOLS, LIQUID, N.O.S. (including C2-C12 homologues)	8		II	Category B	
3145	ALKYLPHENOLS, LIQUID, N.O.S. (including C2-C12 homologues)	8		III	Category A	
3146	ORGANOTIN COMPOUND, SOLID, N.O.S.	6.1	P	I	Category B SW2	
3146	ORGANOTIN COMPOUND, SOLID, N.O.S.	6.1	P	II	Category A SW2	

UN Number	PROPER SHIPPING NAME (Note: When there is more than one packing group or PSN the UN No. has been annotated with a, b, c)	Class or division	Subsidiary risk(s)	Packing Group	Stowage and Handling	Segregation
3146	ORGANOTIN COMPOUND, SOLID, N.O.S.	6.1	P	III	Category A SW2	
3147	DYE, SOLID, CORROSIVE, N.O.S. or DYE INTERMEDIATE, SOLID, CORROSIVE, N.O.S.	8		I	Category A	
3147	DYE, SOLID, CORROSIVE, N.O.S. or DYE INTERMEDIATE, SOLID, CORROSIVE, N.O.S.	8		II	Category A	
3147	DYE, SOLID, CORROSIVE, N.O.S. or DYE INTERMEDIATE, SOLID, CORROSIVE, N.O.S.	8		III	Category A	
3148	WATER-REACTIVE LIQUID, N.O.S.	4.3		I	Category E SW2	
3148	WATER-REACTIVE LIQUID, N.O.S.	4.3		II	Category E SW2	
3148	WATER-REACTIVE LIQUID, N.O.S.	4.3		III	Category E SW2	
3149	HYDROGEN PEROXIDE AND PEROXYACETIC ACID MIXTURE, with acid(s), water and not more than 5	5.1	8	II	Category D SW1	SG16 SG59 SG72
3150	DEVICES, SMALL, HYDROCARBON GAS POWERED or HYDROCARBON GAS REFILLS FOR SMALL DEVICES wi	2.1			Category B SW2	
3151	POLYHALOGENATED BIPHENYLS, LIQUID or POLYHALOGENATED TERPHENYLS, LIQUID	9		II	Category A	SG50
3152	POLYHALOGENATED BIPHENYLS, SOLID or POLYHALOGENATED TERPHENYLS, SOLID	9	P	II	Category A	SG50
3153	PERFLUORO (METHYL VINYL ETHER)	2.1			Category E SW2	
3154	PERFLUORO (ETHYL VINYL ETHER)	2.1			Category E SW2	
3155	PENTACHLOROPHENOL	6.1	P	II	Category A	
3156	COMPRESSED GAS, OXIDIZING, N.O.S.	2.2	5.1		Category D	
3157	LIQUEFIED GAS, OXIDIZING, N.O.S.	2.2	5.1		Category D	
3158	GAS, REFRIGERATED LIQUID, N.O.S.	2.2			Category D	
3159	1,1,1,2-TETRAFLUOROETHANE (REFRIGERANT GAS R 134a)	2.2			Category A	
3160	LIQUEFIED GAS, TOXIC, FLAMMABLE, N.O.S.	2.3	2.1		Category D SW2	
3161	LIQUEFIED GAS, FLAMMABLE, N.O.S.	2.1			Category D SW2	
3162	LIQUEFIED GAS, TOXIC, N.O.S.	2.3			Category D SW2	
3163	LIQUEFIED GAS, N.O.S.	2.2			Category A	
3164	ARTICLES, PRESSURIZED, PNEUMATIC or HYDRAULIC (containing non-flammable gas)	2.2			Category A	
3165	AIRCRAFT HYDRAULIC POWER UNIT FUEL TANK (containing a mixture of anhydrous hydrazine and	3	"6.1/8	I	Category D SW2	SG5 SG8 SG13
3166	ENGINE, INTERNAL COMBUSTION or VEHICLE, FLAMMABLE GAS POWERED or VEHICLE, FLAMMABLE LIQU	9			Category A	
3167	GAS SAMPLE, NON-PRESSURIZED, FLAMMABLE, N.O.S., not refrigerated liquid	2.1			Category D	
3168	GAS SAMPLE, NON-PRESSURIZED, TOXIC, FLAMMABLE, N.O.S., not refrigerated liquid	2.3	2.1		Category D	

UN Number	PROPER SHIPPING NAME (Note: When there is more than one packing group or PSN the UN No. has been annotated with a, b, c)	Class or division	Subsidiary risk(s)	Packing Group	Stowage and Handling	Segregation
3169	GAS SAMPLE, NON-PRESSURIZED, TOXIC, N.O.S., not refrigerated liquid	2.3			Category D	
3170	ALUMINIUM SMELTING BY-PRODUCTS or ALUMINIUM REMELTING BY-PRODUCTS	4.3		II	Category B SW5 H1	
3170	ALUMINIUM SMELTING BY-PRODUCTS or ALUMINIUM REMELTING BY-PRODUCTS	4.3		III	Category B SW5 H1	
3171	BATTERY-POWERED VEHICLE or BATTERY-POWERED EQUIPMENT	9			Category A	
3172	TOXINS, EXTRACTED FROM LIVING SOURCES, LIQUID, N.O.S.	6.1		I	Category B	
3172	TOXINS, EXTRACTED FROM LIVING SOURCES, LIQUID, N.O.S.	6.1		II	Category B	
3172	TOXINS, EXTRACTED FROM LIVING SOURCES, LIQUID, N.O.S.	6.1		III	Category A	
3174	TITANIUM DISULPHIDE	4.2		III	Category A	
3175	SOLIDS CONTAINING FLAMMABLE LIQUID, N.O.S.	4.1		II	Category B	
3176	FLAMMABLE SOLID, ORGANIC, MOLTEN, N.O.S.	4.1		II	Category C	
3176	FLAMMABLE SOLID, ORGANIC, MOLTEN, N.O.S.	4.1		III	Category C	
3178	FLAMMABLE SOLID, INORGANIC, N.O.S.	4.1		II	Category B	
3178	FLAMMABLE SOLID, INORGANIC, N.O.S.	4.1		III	Category B	
3179	FLAMMABLE SOLID, TOXIC, INORGANIC, N.O.S.	4.1	6.1	II	Category B SW2	
3179	FLAMMABLE SOLID, TOXIC, INORGANIC, N.O.S.	4.1	6.1	III	Category B SW2	
3180	FLAMMABLE SOLID, CORROSIVE, INORGANIC, N.O.S.	4.1	8	II	Category D SW2	
3180	FLAMMABLE SOLID, CORROSIVE, INORGANIC, N.O.S.	4.1	8	III	Category D SW2	
3181	METAL SALTS OF ORGANIC COMPOUNDS, FLAMMABLE, N.O.S.	4.1		II	Category B SW2	
3181	METAL SALTS OF ORGANIC COMPOUNDS, FLAMMABLE, N.O.S.	4.1		III	Category B SW2	
3182	METAL HYDRIDES, FLAMMABLE, N.O.S.	4.1		II	Category E	
3182	METAL HYDRIDES, FLAMMABLE, N.O.S.	4.1		III	Category E	
3183	SELF-HEATING LIQUID, ORGANIC, N.O.S.	4.2		II	Category C	
3183	SELF-HEATING LIQUID, ORGANIC, N.O.S.	4.2		III	Category C	
3184	SELF-HEATING LIQUID, TOXIC, ORGANIC, N.O.S.	4.2	6.1	II	Category C	
3184	SELF-HEATING LIQUID, TOXIC, ORGANIC, N.O.S.	4.2	6.1	III	Category C	
3185	SELF-HEATING LIQUID, CORROSIVE, ORGANIC, N.O.S.	4.2	8	II	Category C	
3185	SELF-HEATING LIQUID, CORROSIVE, ORGANIC, N.O.S.	4.2	8	III	Category C	
3186	SELF-HEATING LIQUID, INORGANIC, N.O.S.	4.2		II	Category C	
3186	SELF-HEATING LIQUID, INORGANIC, N.O.S.	4.2		III	Category C	
3187	SELF-HEATING LIQUID, TOXIC, INORGANIC, N.O.S.	4.2	6.1	II	Category C	
3187	SELF-HEATING LIQUID, TOXIC, INORGANIC, N.O.S.	4.2	6.1	III	Category C	
3188	SELF-HEATING LIQUID, CORROSIVE, INORGANIC, N.O.S.	4.2	8	II	Category C	
3188	SELF-HEATING LIQUID, CORROSIVE, INORGANIC, N.O.S.	4.2	8	III	Category C	
3189	METAL POWDER, SELF-HEATING, N.O.S.	4.2		II	Category C	

UN Number	PROPER SHIPPING NAME (Note: When there is more than one packing group or PSN the UN No. has been annotated with a, b, c)	Class or division	Subsidiary risk(s)	Packing Group	Stowage and Handling	Segregation
3189	METAL POWDER, SELF-HEATING, N.O.S.	4.2		III	Category C	
3190	SELF-HEATING SOLID, INORGANIC, N.O.S.	4.2		II	Category C	
3190	SELF-HEATING SOLID, INORGANIC, N.O.S.	4.2		III	Category C	
3191	SELF-HEATING SOLID, TOXIC, INORGANIC, N.O.S.	4.2	6.1	II	Category C	
3191	SELF-HEATING SOLID, TOXIC, INORGANIC, N.O.S.	4.2	6.1	III	Category C	
3192	SELF-HEATING SOLID, CORROSIVE, INORGANIC, N.O.S.	4.2	8	II	Category C	
3192	SELF-HEATING SOLID, CORROSIVE, INORGANIC, N.O.S.	4.2	8	III	Category C	
3194	PYROPHORIC LIQUID, INORGANIC, N.O.S.	4.2		I	Category D	SG63
3200	PYROPHORIC SOLID, INORGANIC, N.O.S.	4.2		I	Category D	
3205	ALKALINE EARTH METAL ALCOHOLATES, N.O.S.	4.2		II	Category B	
3205	ALKALINE EARTH METAL ALCOHOLATES, N.O.S.	4.2		III	Category B	
3206	ALKALI METAL ALCOHOLATES, SELF-HEATING, CORROSIVE, N.O.S.	4.2	8	II	Category B	
3206	ALKALI METAL ALCOHOLATES, SELF-HEATING, CORROSIVE, N.O.S.	4.2	8	III	Category B	
3208	METALLIC SUBSTANCE, WATER-REACTIVE, N.O.S.	4.3		I	Category E SW2	
3208	METALLIC SUBSTANCE, WATER-REACTIVE, N.O.S.	4.3		II	Category E SW2	
3208	METALLIC SUBSTANCE, WATER-REACTIVE, N.O.S.	4.3		III	Category E SW2	
3209	METALLIC SUBSTANCE, WATER-REACTIVE, SELF-HEATING, N.O.S.	4.3	4.2	I	Category E SW2	
3209	METALLIC SUBSTANCE, WATER-REACTIVE, SELF-HEATING, N.O.S.	4.3	4.2	II	Category E SW2	
3209	METALLIC SUBSTANCE, WATER-REACTIVE, SELF-HEATING, N.O.S.	4.3	4.2	III	Category E SW2	
3210	CHLORATES, INORGANIC, AQUEOUS SOLUTION, N.O.S.	5.1		II	Category B	SG38 SG49 SG62
3210	CHLORATES, INORGANIC, AQUEOUS SOLUTION, N.O.S.	5.1		III	Category B	SG38 SG49 SG62
3211	PERCHLORATES, INORGANIC, AQUEOUS SOLUTION, N.O.S.	5.1		II	Category B	SG38 SG49 SG62
3211	PERCHLORATES, INORGANIC, AQUEOUS SOLUTION, N.O.S.	5.1		III	Category B	SG38 SG49 SG62
3212	HYPOCHLORITES, INORGANIC, N.O.S.	5.1		II	Category D SW1 SW17	SG35 SG38 SG49 SG53 SG60
3213	BROMATES, INORGANIC, AQUEOUS SOLUTION, N.O.S.	5.1		II	Category B	SG38 SG49 SG62
3213	BROMATES, INORGANIC, AQUEOUS SOLUTION, N.O.S.	5.1		III	Category B	SG38 SG49 SG62
3214	PERMANGANATES, INORGANIC, AQUEOUS SOLUTION, N.O.S.	5.1		II	Category D	SG38 SG49 SG60 SG62



UN Number	PROPER SHIPPING NAME (Note: When there is more than one packing group or PSN the UN No. has been annotated with a, b, c)	Class or division	Subsidiary risk(s)	Packing Group	Stowage and Handling	Segregation
3215	PERSULPHATES, INORGANIC, N.O.S.	5.1		III	Category A	SG40 SG49
3216	PERSULPHATES, INORGANIC, AQUEOUS SOLUTION, N.O.S.	5.1		III	Category A	SG38 SG49 SG62
3218	NITRATES, INORGANIC, AQUEOUS SOLUTION, N.O.S.	5.1		II	Category B	SG38 SG49 SG62
3218	NITRATES, INORGANIC, AQUEOUS SOLUTION, N.O.S.	5.1		III	Category B	SG38 SG49 SG62
3219	NITRITES, INORGANIC, AQUEOUS SOLUTION, N.O.S.	5.1		II	Category B	SG38 SG49 SG62
3219	NITRITES, INORGANIC, AQUEOUS SOLUTION, N.O.S.	5.1		III	Category B	SG38 SG49 SG62
3220	PENTAFLUOROETHANE (REFRIGERANT GAS R 125)	2.2			Category A	
3221	SELF-REACTIVE LIQUID TYPE B	4.1	See SP181		Category D SW1	SG1 SG35 SG36
3222	SELF-REACTIVE SOLID TYPE B	4.1	See SP181		Category D SW1	SG1 SG35 SG36
3223	SELF-REACTIVE LIQUID TYPE C	4.1			Category D SW1	SG35 SG36
3224	SELF-REACTIVE SOLID TYPE C	4.1			Category D SW1	SG35 SG36
3225	SELF-REACTIVE LIQUID TYPE D	4.1			Category D SW1	SG35 SG36
3226	SELF-REACTIVE SOLID TYPE D	4.1			Category D SW1	SG35 SG36
3227	SELF-REACTIVE LIQUID TYPE E	4.1			Category D SW1	SG35 SG36
3228	SELF-REACTIVE SOLID TYPE E	4.1			Category D SW1	SG35 SG36
3229	SELF-REACTIVE LIQUID TYPE F	4.1			Category D SW1	SG35 SG36
3230	SELF-REACTIVE SOLID TYPE F	4.1			Category D SW1	SG35 SG36
3231	SELF-REACTIVE LIQUID TYPE B, TEMPERATURE CONTROLLED	4.1			Category D SW1 SW3	SG1 SG35 SG36
3232	SELF-REACTIVE SOLID TYPE B, TEMPERATURE CONTROLLED	4.1			Category D SW1 SW3	SG1 SG35 SG36
3233	SELF-REACTIVE LIQUID TYPE C, TEMPERATURE CONTROLLED	4.1			Category D SW1 SW3	SG35 SG36
3234	SELF-REACTIVE SOLID TYPE C, TEMPERATURE CONTROLLED	4.1			Category D SW1 SW3	SG35 SG36
3235	SELF-REACTIVE LIQUID TYPE D, TEMPERATURE CONTROLLED	4.1			Category D SW1 SW3	SG35 SG36
3236	SELF-REACTIVE SOLID TYPE D, TEMPERATURE CONTROLLED	4.1			Category D SW1 SW3	SG35 SG36
3237	SELF-REACTIVE LIQUID TYPE E, TEMPERATURE CONTROLLED	4.1			Category D SW1 SW3	SG35 SG36
3238	SELF-REACTIVE SOLID TYPE E, TEMPERATURE CONTROLLED	4.1			Category D SW1 SW3	SG35 SG36

UN Number	PROPER SHIPPING NAME (Note: When there is more than one packing group or PSN the UN No. has been annotated with a, b, c)	Class or division	Subsidiary risk(s)	Packing Group	Stowage and Handling	Segregation
3239	SELF-REACTIVE LIQUID TYPE F, TEMPERATURE CONTROLLED	4.1			Category D SW1 SW3	SG35 SG36
3240	SELF-REACTIVE SOLID TYPE F, TEMPERATURE CONTROLLED	4.1			Category D SW1 SW3	SG35 SG36
3241	2-BROMO-2-NITROPROPANE-1,3-DIOL	4.1		III	Category C SW1 SW2 H2 H3	
3242	AZODICARBONAMIDE	4.1		II	Category D	SG17 SG35 SG36
3243	SOLIDS CONTAINING TOXIC LIQUID, N.O.S.	6.1		II	Category B SW2	
3244	SOLIDS CONTAINING CORROSIVE LIQUID, N.O.S.	8		II	Category B SW2	
3245	GENETICALLY MODIFIED MICROORGANISMS or GENETICALLY MODIFIED ORGANISMS	9			SW7	SG50
3246	METHANESULPHONYL CHLORIDE	6.1	8	I	Category D SW2	
3247	SODIUM PEROXOBORATE, ANHYDROUS	5.1		II	Category A SW1 H1	
3248	MEDICINE, LIQUID, FLAMMABLE, TOXIC, N.O.S	3	6.1	II	Category B SW2	
3248	MEDICINE, LIQUID, FLAMMABLE, TOXIC, N.O.S	3	6.1	III	Category A	
3249	MEDICINE, SOLID, TOXIC, N.O.S.	6.1		II	Category C SW2	
3249	MEDICINE, SOLID, TOXIC, N.O.S.	6.1		III	Category C SW2	
3250	CHLOROACETIC ACID, MOLTEN	6.1	8	II	Category C SW2	
3251	ISOSORBIDE-5-MONONITRATE	4.1		III	Category D SW1 H2 H3	
3252	DIFLUOROMETHANE (REFRIGERANT GAS R 32)	2.1			Category D SW2	
3253	DISODIUM TRIOXOSILICATE	8		III	Category A	SG35
3254	TRIBUTYLPHOSPHANE	4.2		I	Category D	SG44
3255	tert-BUTYL HYPOCHLORITE	4.2	8	I	Category D	
3256	ELEVATED TEMPERATURE LIQUID, FLAMMABLE, N.O.S. with flashpoint above 60°C, at or above i	3		III	Category A	
3257	ELEVATED TEMPERATURE LIQUID, N.O.S. at or above 100°C and below its flashpoint (includin	9		III	Category A SW5	
3258	ELEVATED TEMPERATURE SOLID, N.O.S. at or above 240°C	9		III	Category A SW5	
3259	AMINES, SOLID, CORROSIVE, N.O.S. or POLYAMINES, SOLID, CORROSIVE, N.O.S.	8		I	Category A	SG35
3259	AMINES, SOLID, CORROSIVE, N.O.S. or POLYAMINES, SOLID, CORROSIVE, N.O.S.	8		II	Category A	SG35
3259	AMINES, SOLID, CORROSIVE, N.O.S. or POLYAMINES, SOLID, CORROSIVE, N.O.S.	8		III	Category A	SG35
3260	CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S.	8		I	Category B	
3260	CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S.	8		II	Category B	



UN Number	PROPER SHIPPING NAME (Note: When there is more than one packing group or PSN the UN No. has been annotated with a, b, c)	Class or division	Subsidiary risk(s)	Packing Group	Stowage and Handling	Segregation
3260	CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S.	8		III	Category A	
3261	CORROSIVE SOLID, ACIDIC, ORGANIC, N.O.S.	8		I	Category B	
3261	CORROSIVE SOLID, ACIDIC, ORGANIC, N.O.S.	8		II	Category B	
3261	CORROSIVE SOLID, ACIDIC, ORGANIC, N.O.S.	8		III	Category A	
3262	CORROSIVE SOLID, BASIC, INORGANIC, N.O.S.	8		I	Category B	SG35
3262	CORROSIVE SOLID, BASIC, INORGANIC, N.O.S.	8		II	Category B	SG35
3262	CORROSIVE SOLID, BASIC, INORGANIC, N.O.S.	8		III	Category A	SG35
3263	CORROSIVE SOLID, BASIC, ORGANIC, N.O.S.	8		I	Category B	SG35
3263	CORROSIVE SOLID, BASIC, ORGANIC, N.O.S.	8		II	Category B	SG35
3263	CORROSIVE SOLID, BASIC, ORGANIC, N.O.S.	8		III	Category A	SG35
3264	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.	8		I	Category B SW2	
3264	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.	8		II	Category B SW2	
3264	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.	8		III	Category A SW2	
3265	CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.	8		I	Category B SW2	
3265	CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.	8		II	Category B SW2	
3265	CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.	8		III	Category A SW2	
3266	CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S.	8		I	Category B SW2	SG35
3266	CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S.	8		II	Category B SW2	SG35
3266	CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S.	8		III	Category A SW2	SG35
3267	CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S.	8		I	Category B SW2	SG35
3267	CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S.	8		II	Category B SW2	SG35
3267	CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S.	8		III	Category A SW2	SG35
3268	AIR BAG INFLATORS or AIR BAG MODULES or SEAT-BELT PRETENSIONERS	9		III	Category A	
3269	POLYESTER RESIN KIT	3		II	Category B	
3269	POLYESTER RESIN KIT	3		III	Category A	
3270	NITROCELLULOSE MEMBRANE FILTERS with not more than 12.6% nitrogen, by dry mass	4.1		II	Category D	
3271	ETHERS, N.O.S.	3		II	Category B	
3271	ETHERS, N.O.S.	3		III	Category A	
3272	ESTERS, N.O.S.	3		II	Category B	
3272	ESTERS, N.O.S.	3		III	Category A	
3273	NITRILES, FLAMMABLE, TOXIC, N.O.S.	3	6.1	I	Category E SW2	SG35
3273	NITRILES, FLAMMABLE, TOXIC, N.O.S.	3	6.1	II	Category B SW2	SG35
3274	ALCOHOLATES SOLUTION, N.O.S. in alcohol	3	8	II	Category B	

UN Number	PROPER SHIPPING NAME (Note: When there is more than one packing group or PSN the UN No. has been annotated with a, b, c)	Class or division	Subsidiary risk(s)	Packing Group	Stowage and Handling	Segregation
3275	NITRILES, TOXIC, FLAMMABLE, N.O.S.	6.1	3	I	Category B SW2	SG35
3275	NITRILES, TOXIC, FLAMMABLE, N.O.S.	6.1	3	II	Category B SW2	SG35
3276	NITRILES, TOXIC, LIQUID, N.O.S.	6.1		I	Category B	SG35
3276	NITRILES, TOXIC, LIQUID, N.O.S.	6.1		II	Category B	SG35
3276	NITRILES, TOXIC, LIQUID, N.O.S.	6.1		III	Category A	SG35
3277	CHLOROFORMATES, TOXIC, CORROSIVE, N.O.S.	6.1	8	II	Category A SW1 SW2 H1 H2	
3278	ORGANOPHOSPHORUS COMPOUND, TOXIC, LIQUID, N.O.S.	6.1		I	Category B	
3278	ORGANOPHOSPHORUS COMPOUND, TOXIC, LIQUID, N.O.S.	6.1		II	Category B	
3278	ORGANOPHOSPHORUS COMPOUND, TOXIC, LIQUID, N.O.S.	6.1		III	Category A	
3279	ORGANOPHOSPHORUS COMPOUND, TOXIC, FLAMMABLE N.O.S.	6.1	3	I	Category B SW2	
3279	ORGANOPHOSPHORUS COMPOUND, TOXIC, FLAMMABLE N.O.S.	6.1	3	II	Category B SW2	
3280	ORGANOARSENIC COMPOUND, LIQUID, N.O.S.	6.1		I	Category B	
3280	ORGANOARSENIC COMPOUND, LIQUID, N.O.S.	6.1		II	Category B	
3280	ORGANOARSENIC COMPOUND, LIQUID, N.O.S.	6.1		III	Category A	
3281	METAL CARBONYLS, LIQUID, N.O.S.	6.1		I	Category D SW2	
3281	METAL CARBONYLS, LIQUID, N.O.S.	6.1		II	Category B SW2	
3281	METAL CARBONYLS, LIQUID, N.O.S.	6.1		III	Category B SW2	
3282	ORGANOMETALLIC COMPOUND, TOXIC, LIQUID, N.O.S.	6.1		I	Category B	
3282	ORGANOMETALLIC COMPOUND, TOXIC, LIQUID, N.O.S.	6.1		II	Category B	
3282	ORGANOMETALLIC COMPOUND, TOXIC, LIQUID, N.O.S.	6.1		III	Category A	
3283	SELENIUM COMPOUND, SOLID, N.O.S.	6.1		I	Category B	
3283	SELENIUM COMPOUND, SOLID, N.O.S.	6.1		II	Category B	
3283	SELENIUM COMPOUND, SOLID, N.O.S.	6.1		III	Category A	
3284	TELLURIUM COMPOUND, N.O.S.	6.1		I	Category B	
3284	TELLURIUM COMPOUND, N.O.S.	6.1		II	Category B	
3284	TELLURIUM COMPOUND, N.O.S.	6.1		III	Category A	
3285	VANADIUM COMPOUND, N.O.S.	6.1		I	Category B	
3285	VANADIUM COMPOUND, N.O.S.	6.1		II	Category B	
3285	VANADIUM COMPOUND, N.O.S.	6.1		III	Category A	
3286	FLAMMABLE LIQUID, TOXIC, CORROSIVE, N.O.S.	3	6.1/8	I	Category E SW2	SG5 SG8
3286	FLAMMABLE LIQUID, TOXIC, CORROSIVE, N.O.S.	3	6.1/8	II	Category B SW2	SG5 SG8
3287	TOXIC LIQUID, INORGANIC, N.O.S.	6.1		I	Category B SW2	

UN Number	PROPER SHIPPING NAME (Note: When there is more than one packing group or PSN the UN No. has been annotated with a, b, c)	Class or division	Subsidiary risk(s)	Packing Group	Stowage and Handling	Segregation
3287	TOXIC LIQUID, INORGANIC, N.O.S.	6.1		II	Category B SW2	
3287	TOXIC LIQUID, INORGANIC, N.O.S.	6.1		III	Category A SW2	
3288	TOXIC SOLID, INORGANIC, N.O.S.	6.1		I	Category B	
3288	TOXIC SOLID, INORGANIC, N.O.S.	6.1		II	Category B	
3288	TOXIC SOLID, INORGANIC, N.O.S.	6.1		III	Category A	
3289	TOXIC LIQUID, CORROSIVE, INORGANIC, N.O.S.	6.1	8	I	Category B SW2	
3289	TOXIC LIQUID, CORROSIVE, INORGANIC, N.O.S.	6.1	8	II	Category B SW2	
3290	TOXIC SOLID, CORROSIVE, INORGANIC, N.O.S.	6.1	8	I	Category B SW2	
3290	TOXIC SOLID, CORROSIVE, INORGANIC, N.O.S.	6.1	8	II	Category B SW2	
3291	CLINICAL WASTE, UNSPECIFIED, N.O.S. or (BIO) MEDICAL WASTE, N.O.S. or REGULATED MEDICAL	6.2		II	SW28	
3292	BATTERIES, CONTAINING SODIUM or CELLS, CONTAINING SODIUM	4.3		II	Category A	
3293	HYDRAZINE, AQUEOUS SOLUTION with not more than 37% hydrazine, by mass	6.1		III	Category A	SG35
3294	HYDROGEN CYANIDE, SOLUTION IN ALCOHOL with not more than 45% hydrogen cyanide	6.1	3P	I	Category D SW2	
3295	HYDROCARBONS, LIQUID, N.O.S.	3		I	Category E	
3295	HYDROCARBONS, LIQUID, N.O.S.	3		II	Category B	
3295	HYDROCARBONS, LIQUID, N.O.S.	3		III	Category A	
3296	HEPTAFLUOROPROPANE (REFRIGERANT GAS R 227)	2.2			Category A	
3297	ETHYLENE OXIDE AND CHLOROTETRAFLUOROETHANE MIXTURE with not more than 8.8% ethylene oxide	2.2			Category A	
3298	ETHYLENE OXIDE AND PENTAFLUOROETHANE MIXTURE with not more than 7.9% ethylene oxide	2.2			Category A	
3299	ETHYLENE OXIDE AND TETRAFLUOROETHANE MIXTURE with not more than 5.6% ethylene oxide	2.2			Category A	
3300	ETHYLENE OXIDE AND CARBON DIOXIDE MIXTURE with more than 87% ethylene oxide	2.3	2.1		Category D SW2	
3301	CORROSIVE LIQUID, SELF-HEATING, N.O.S.	8	4.2	I	Category D	
3301	CORROSIVE LIQUID, SELF-HEATING, N.O.S.	8	4.2	II	Category D	
3302	2-DIMETHYLAMINOETHYL ACRYLATE	6.1		II	Category D SW1	
3303	COMPRESSED GAS, TOXIC, OXIDIZING, N.O.S.	2.3	5.1		Category D SW2	
3304	COMPRESSED GAS, TOXIC, CORROSIVE, N.O.S.	2.3	8		Category D SW2	
3305	COMPRESSED GAS, TOXIC, FLAMMABLE, CORROSIVE, N.O.S.	2.3	2.1/8		Category D SW2	SG4 SG9
3306	COMPRESSED GAS, TOXIC, OXIDIZING, CORROSIVE, N.O.S.	2.3	5.1/8		Category D SW2	SG6 SG19
3307	LIQUEFIED GAS, TOXIC, OXIDIZING, N.O.S.	2.3	5.1		Category D SW2	

UN Number	PROPER SHIPPING NAME (Note: When there is more than one packing group or PSN the UN No. has been annotated with a, b, c)	Class or division	Subsidiary risk(s)	Packing Group	Stowage and Handling	Segregation
3308	LIQUEFIED GAS, TOXIC, CORROSIVE, N.O.S.	2.3	8		Category D SW2	
3309	LIQUEFIED GAS, TOXIC, FLAMMABLE, CORROSIVE, N.O.S.	2.3	2.1/8		Category D SW2	SG4 SG9
3310	LIQUEFIED GAS, TOXIC, OXIDIZING, CORROSIVE, N.O.S.	2.3	5.1/8		Category D SW2	SG6 SG19
3311	GAS, REFRIGERATED LIQUID, OXIDIZING, N.O.S.	2.2	5.1		Category D	
3312	GAS, REFRIGERATED LIQUID, FLAMMABLE, N.O.S.	2.1			Category D SW2	
3313	ORGANIC PIGMENTS, SELF-HEATING	4.2		II	Category C	
3313	ORGANIC PIGMENTS, SELF-HEATING	4.2		III	Category C	
3314	PLASTICS MOULDING COMPOUND in dough, sheet or extruded rope form, evolving flammable vapour	9		III	Category E SW1 SW6	SG5 SG14
3315	CHEMICAL SAMPLE, TOXIC	6.1		I	Category D SW2	
3316	CHEMICAL KIT or FIRST AID KIT	9			Category A	
3317	2-AMINO-4,6-DINITROPHENOL, WETTED with not less than 20% water, by mass	4.1		I	Category D	SG7 SG30
3318	AMMONIA SOLUTION relative density less than 0.880 at 15°C in water, with more than 50% ammonia	2.3	8		Category D SW2	SG35 SG46
3319	NITROGLYCERIN MIXTURE, DESENSITIZED, SOLID, N.O.S. with more than 2% but not more than 10% nitroglycerin, by mass	4.1			Category E	
3320	SODIUM BOROHYDRIDE AND SODIUM HYDROXIDE SOLUTION with not more than 12% sodium borohydride and not more than 40% sodium hydroxide, by mass	8		II	Category A	SG35
3320	SODIUM BOROHYDRIDE AND SODIUM HYDROXIDE SOLUTION with not more than 12% sodium borohydride and not more than 40% sodium hydroxide, by mass	8		III	Category A	SG35
3321	RADIOACTIVE MATERIAL, LOW SPECIFIC ACTIVITY (LSA-II), non fissile or fissile-excepted	7	See SP172		Category A SW20	
3322	RADIOACTIVE MATERIAL, LOW SPECIFIC ACTIVITY (LSA-III), non fissile or fissile-excepted	7	See SP172		Category A SW20	
3323	RADIOACTIVE MATERIAL, TYPE C PACKAGE, non fissile or fissile-excepted	7	See SP172		Category A SW12	
3324	RADIOACTIVE MATERIAL, LOW SPECIFIC ACTIVITY (LSA-II), FISSILE	7	See SP172		Category A SW12 SW20	
3325	RADIOACTIVE MATERIAL, LOW SPECIFIC ACTIVITY, (LSA-III), FISSILE	7	See SP172		Category A SW12	
3326	RADIOACTIVE MATERIAL, SURFACE CONTAMINATED OBJECTS (SCO-I or SCO-II), FISSILE	7	See SP172		Category A SW12	
3327	RADIOACTIVE MATERIAL, TYPE A PACKAGE, FISSILE, non-special form	7	See SP172		Category A SW12 SW20 SW21	
3328	RADIOACTIVE MATERIAL, TYPE B(U) PACKAGE, FISSILE	7	See SP172		Category A SW12	
3329	RADIOACTIVE MATERIAL, TYPE B(M) PACKAGE, FISSILE	7	See SP172		Category A SW12	
3330	RADIOACTIVE MATERIAL, TYPE C PACKAGE, FISSILE	7	See SP172		Category A SW12	
3331	RADIOACTIVE MATERIAL, TRANSPORTED UNDER SPECIAL ARRANGEMENT, FISSILE	7	See SP172		Category A SW13	



UN Number	PROPER SHIPPING NAME (Note: When there is more than one packing group or PSN the UN No. has been annotated with a, b, c)	Class or division	Subsidiary risk(s)	Packing Group	Stowage and Handling	Segregation
3332	RADIOACTIVE MATERIAL, TYPE A PACKAGE, SPECIAL FORM, non fissile or fissile-excepted	7	See SP172		Category A	
3333	RADIOACTIVE MATERIAL, TYPE A PACKAGE, SPECIAL FORM, FISSILE	7	See SP172		Category A SW12	
3334	AVIATION REGULATED LIQUID, N.O.S.	9			-	
3335	AVIATION REGULATED SOLID, N.O.S.	9			-	
3336	MERCAPTANS, LIQUID, FLAMMABLE, N.O.S. or MERCAPTAN MIXTURE, LIQUID, FLAMMABLE, N.O.S.	3		I	Category E	SG50 SG57
3336	MERCAPTANS, LIQUID, FLAMMABLE, N.O.S. or MERCAPTAN MIXTURE, LIQUID, FLAMMABLE, N.O.S.	3		II	Category B	SG50 SG57
3336	MERCAPTANS, LIQUID, FLAMMABLE, N.O.S. or MERCAPTAN MIXTURE, LIQUID, FLAMMABLE, N.O.S.	3		III	Category B	SG50 SG57
3337	REFRIGERANT GAS R 404A	2.2			Category A	
3338	REFRIGERANT GAS R 407A	2.2			Category A	
3339	REFRIGERANT GAS R 407B	2.2			Category A	
3340	REFRIGERANT GAS R 407C	2.2			Category A	
3341	THIOUREA DIOXIDE	4.2		II	Category D	
3341	THIOUREA DIOXIDE	4.2		III	Category D	
3342	XANTHATES	4.2		II	Category D SW2	
3342	XANTHATES	4.2		III	Category D SW2	
3343	NITROGLYCERIN MIXTURE, DESENSITIZED, LIQUID, FLAMMABLE, N.O.S. with not more than 30% nitroglycerin, by mass	3			Category D	
3344	PENTAERYTHRITE TETRANITRATE (PENTAERYTHRITOL TETRANITRATE; PETN) MIXTURE, DESENSITIZED, SOLID, N.O.S. with more than 10% but not more than 20% PETN, by mass	4.1		II	Category E	
3345	PHENOXYACETIC ACID DERIVATIVE PESTICIDE, SOLID, TOXIC	6.1		I	Category A SW2	
3345	PHENOXYACETIC ACID DERIVATIVE PESTICIDE, SOLID, TOXIC	6.1		II	Category A SW2	
3345	PHENOXYACETIC ACID DERIVATIVE PESTICIDE, SOLID, TOXIC	6.1		III	Category A SW2	
3346	PHENOXYACETIC ACID DERIVATIVE PESTICIDE, LIQUID, FLAMMABLE, TOXIC flashpoint less than 23°C	3	6.1	I	Category B SW2	
3346	PHENOXYACETIC ACID DERIVATIVE PESTICIDE, LIQUID, FLAMMABLE, TOXIC flashpoint less than 23°C	3	6.1	II	Category B SW2	
3347	PHENOXYACETIC ACID DERIVATIVE PESTICIDE, LIQUID, TOXIC, FLAMMABLE flashpoint not than 23°C	6.1	3	I	Category B SW2	
3347	PHENOXYACETIC ACID DERIVATIVE PESTICIDE, LIQUID, TOXIC, FLAMMABLE flashpoint not less than 23°C	6.1	3	II	Category B SW2	
3347	PHENOXYACETIC ACID DERIVATIVE PESTICIDE, LIQUID, TOXIC, FLAMMABLE flashpoint not less than 23°C	6.1	3	III	Category A SW2	

UN Number	PROPER SHIPPING NAME (Note: When there is more than one packing group or PSN the UN No. has been annotated with a, b, c)	Class or division	Subsidiary risk(s)	Packing Group	Stowage and Handling	Segregation
3348	PHENOXYACETIC ACID DERIVATIVE PESTICIDE, LIQUID, TOXIC	6.1		I	Category B SW2	
3348	PHENOXYACETIC ACID DERIVATIVE PESTICIDE, LIQUID, TOXIC	6.1		II	Category B SW2	
3348	PHENOXYACETIC ACID DERIVATIVE PESTICIDE, LIQUID, TOXIC	6.1		III	Category A SW2	
3349	PYRETHROID PESTICIDE, SOLID, TOXIC	6.1		I	Category A SW2	
3349	PYRETHROID PESTICIDE, SOLID, TOXIC	6.1		II	Category A SW2	
3349	PYRETHROID PESTICIDE, SOLID, TOXIC	6.1		III	Category A SW2	
3350	PYRETHROID PESTICIDE, LIQUID, FLAMMABLE, TOXIC flashpoint less than 23°C	3	6.1	I	Category B SW2	
3350	PYRETHROID PESTICIDE, LIQUID, FLAMMABLE, TOXIC flashpoint less than 23°C	3	6.1	II	Category B SW2	
3351	PYRETHROID PESTICIDE, LIQUID, TOXIC, FLAMMABLE flashpoint not less than 23°C	6.1	3	I	Category B SW2	
3351	PYRETHROID PESTICIDE, LIQUID, TOXIC, FLAMMABLE flashpoint not less than 23°C	6.1	3	II	Category B SW2	
3351	PYRETHROID PESTICIDE, LIQUID, TOXIC, FLAMMABLE flashpoint not less than 23°C	6.1	3	III	Category A SW2	
3352	PYRETHROID PESTICIDE, LIQUID, TOXIC	6.1		I	Category B SW2	
3352	PYRETHROID PESTICIDE, LIQUID, TOXIC	6.1		II	Category B SW2	
3352	PYRETHROID PESTICIDE, LIQUID, TOXIC	6.1		III	Category A SW2	
3354	INSECTICIDE GAS, FLAMMABLE, N.O.S.	2.1			Category D	
3355	INSECTICIDE GAS, TOXIC, FLAMMABLE, N.O.S.	2.3	2.1		Category D SW2	
3356	OXYGEN GENERATOR, CHEMICAL	5.1		II	Category D	
3357	NITROGLYCERIN MIXTURE, DESENSITIZED, LIQUID, N.O.S with not more than 30% nitroglycerin,	3		II	Category D	
3358	REFRIGERATING MACHINES containing flammable, non-toxic, liquefied gas	2.1			Category D	
3359	FUMIGATED CARGO TRANSPORT UNIT	9			Category B SW2	
3360	FIBRES, VEGETABLE, DRY	4.1			Category A	
3361	CHLOROSILANES, TOXIC, CORROSIVE, N.O.S.	6.1	8	II	Category C SW2	
3362	CHLOROSILANES, TOXIC, CORROSIVE, FLAMMABLE, N.O.S.	6.1	"3/8	II	Category C SW2	SG5 SG8
3363	DANGEROUS GOODS IN MACHINERY or DANGEROUS GOODS IN APPARATUS	9			Category A	
3364	TRINITROPHENOL (PICRIC ACID), WETTED with not less than 10% water, by mass	4.1		I	Category E	SG7 SG30
3365	TRINITROCHLOROBENZENE (PICRYL CHLORIDE), WETTED with not less than 10% water by mass	4.1		I	Category E	SG7 SG30
3366	TRINITROTOLUENE (TNT), WETTED with not less than 10% water, by mass	4.1		I	Category E	SG7 SG30
3367	TRINITROBENZENE, WETTED with not less than 10% water, by mass	4.1		I	Category E	SG7 SG30

UN Number	PROPER SHIPPING NAME (Note: When there is more than one packing group or PSN the UN No. has been annotated with a, b, c)	Class or division	Subsidiary risk(s)	Packing Group	Stowage and Handling	Segregation
3368	TRINITROBENZOIC ACID, WETTED with not less than 10% water, by mass	4.1		I	Category E	SG7 SG30
3369	SODIUM DINITRO-o-CRESOLATE, WETTED with not less than 10% water, by mass	4.1	6.1P	I	Category E	SG7 SG30
3370	UREA NITRATE, WETTED with not less than 10% water, by mass	4.1		I	Category E	SG7 SG30
3371	2-METHYLBUTANAL	3		II	Category B	
3373	BIOLOGICAL SUBSTANCE, CATEGORY B	6.2			Category C SW2 SW18	
3374	ACETYLENE, SOLVENT FREE	2.1			Category D SW1 SW2	SG46
3375	AMMONIUM NITRATE EMULSION or SUSPENSION or GEL intermediate for blasting explosives	5.1		II	Category D SW1	SG16 SG42 SG45 SG47 SG48 SG51 SG56 SG58 SG59 SG61
3376	4-NITROPHENYLHYDRAZINE, with not less than 30% water, by mass	4.1		I	Category E	SG7 SG30
3377	SODIUM PERBORATE MONOHYDRATE	5.1		III	Category A SW1 SW23 H1	SG59
3378	SODIUM CARBONATE PEROXYHYDRATE	5.1		II	Category A SW1 H1	SG59
3378	SODIUM CARBONATE PEROXYHYDRATE	5.1		III	Category A SW1 SW23 H1	SG59
3379	DESENSITIZED EXPLOSIVE, LIQUID, N.O.S.	3		I	Category D	SG30
3380	DESENSITIZED EXPLOSIVE, SOLID, N.O.S.	4.1		I	Category D	SG7 SG30
3381	TOXIC BY INHALATION LIQUID, N.O.S. with an inhalation toxicity lower than or equal to 200 ml/m <sup>3</sup> and saturated vapour concentration greater than or equal to 500 LC50	6.1		I	Category D SW2	
3382	TOXIC BY INHALATION LIQUID, N.O.S. with an inhalation toxicity lower than or equal to 1000 ml/m <sup>3</sup> and saturated vapour concentration greater than or equal to 10 LC50	6.1		I	Category D SW2	
3383	TOXIC BY INHALATION LIQUID, FLAMMABLE, N.O.S. with an inhalation toxicity lower than or equal to 200 ml/m <sup>3</sup> and saturated vapour concentration greater than or equal to 500 LC50	6.1	3	I	Category D SW2	
3384	TOXIC BY INHALATION LIQUID, FLAMMABLE, N.O.S. with an inhalation toxicity lower than or equal to 1000 ml/m <sup>3</sup> and saturated vapour concentration greater than or equal to 10 LC50	6.1	3	I	Category D SW2	
3385	TOXIC BY INHALATION LIQUID, WATER-REACTIVE, N.O.S. with an inhalation toxicity lower than or equal to 200 ml/m <sup>3</sup> and saturated vapour concentration greater than or equal to 500 LC50	6.1	4.3	I	Category D SW2	



UN Number	PROPER SHIPPING NAME (Note: When there is more than one packing group or PSN the UN No. has been annotated with a, b, c)	Class or division	Subsidiary risk(s)	Packing Group	Stowage and Handling	Segregation
3386	TOXIC BY INHALATION LIQUID, WATER-REACTIVE, N.O.S. with an inhalation toxicity lower than or equal to 1000 ml/m <sup>3</sup> and saturated vapour concentration greater than or equal to 10 LC50	6.1	4.3	I	Category D SW2	
3387	TOXIC BY INHALATION LIQUID, OXIDIZING, N.O.S. with an inhalation toxicity lower than or equal to 200 ml/m <sup>3</sup> and saturated vapour concentration greater than or equal to 500 LC50	6.1	4.3	I	Category D SW2	
3388	TOXIC BY INHALATION LIQUID, OXIDIZING, N.O.S. with an inhalation toxicity lower than or equal to 1000 ml/m <sup>3</sup> and saturated vapour concentration greater than or equal to 10 LC50	6.1	5.1	I	Category D SW2	
3389	TOXIC BY INHALATION LIQUID, CORROSIVE, N.O.S. with an inhalation toxicity lower than or equal to 200 ml/m <sup>3</sup> and saturated vapour concentration greater than or equal to 500 LC50	6.1	8	I	Category D SW2	
3390	TOXIC BY INHALATION LIQUID, CORROSIVE, N.O.S. with an inhalation toxicity lower than equal to 1000 ml/m <sup>3</sup> and saturated vapour concentration greater than or equal to 10 LC50	6.1	8	I	Category D SW2	
3391	ORGANOMETALLIC SUBSTANCE, SOLID, PYROPHORIC	4.2		I	Category D	
3392	ORGANOMETALLIC SUBSTANCE, LIQUID, PYROPHORIC	4.2		I	Category D	SG63
3393	ORGANOMETALLIC SUBSTANCE, SOLID, PYROPHORIC, WATER-REACTIVE	4.2	4.3	I	Category D	SG35
3394	ORGANOMETALLIC SUBSTANCE, LIQUID, PYROPHORIC, WATER-REACTIVE	4.2	4.3	I	Category D	SG35 SG63
3395	ORGANOMETALLIC SUBSTANCE, SOLID, WATER-REACTIVE	4.3		I	Category E SW2	SG35
3395	ORGANOMETALLIC SUBSTANCE, SOLID, WATER-REACTIVE	4.3		II	Category E SW2	SG35
3395	ORGANOMETALLIC SUBSTANCE, SOLID, WATER-REACTIVE	4.3		III	Category E SW2	SG35
3396	ORGANOMETALLIC SUBSTANCE, SOLID, WATER-REACTIVE, FLAMMABLE	4.3	4.1	I	Category E SW2	SG35
3396	ORGANOMETALLIC SUBSTANCE, SOLID, WATER-REACTIVE, FLAMMABLE	4.3	4.1	II	Category E SW2	SG35
3396	ORGANOMETALLIC SUBSTANCE, SOLID, WATER-REACTIVE, FLAMMABLE	4.3	4.1	III	Category E SW2	SG35
3397	ORGANOMETALLIC SUBSTANCE, SOLID, WATER-REACTIVE, SELF-HEATING	4.3	4.2	I	Category E SW2	SG35
3397	ORGANOMETALLIC SUBSTANCE, SOLID, WATER-REACTIVE, SELF-HEATING	4.3	4.2	II	Category E SW2	SG35
3397	ORGANOMETALLIC SUBSTANCE, SOLID, WATER-REACTIVE, SELF-HEATING	4.3	4.2	III	Category E SW2	SG35
3398	ORGANOMETALLIC SUBSTANCE, LIQUID, WATER-REACTIVE	4.3		I	Category E SW2	SG35
3398	ORGANOMETALLIC SUBSTANCE, LIQUID, WATER-REACTIVE	4.3		II	Category E SW2	SG35
3398	ORGANOMETALLIC SUBSTANCE, LIQUID, WATER-REACTIVE	4.3		III	Category E SW2	SG35
3399	ORGANOMETALLIC SUBSTANCE, LIQUID, WATER-REACTIVE, FLAMMABLE	4.3	3	I	Category D SW2	SG35

UN Number	PROPER SHIPPING NAME (Note: When there is more than one packing group or PSN the UN No. has been annotated with a, b, c)	Class or division	Subsidiary risk(s)	Packing Group	Stowage and Handling	Segregation
3399	ORGANOMETALLIC SUBSTANCE, LIQUID, WATER-REACTIVE, FLAMMABLE	4.3	3	II	Category D SW2	SG35
3399	ORGANOMETALLIC SUBSTANCE, LIQUID, WATER-REACTIVE, FLAMMABLE	4.3	3	III	Category E SW2	SG35
3400	ORGANOMETALLIC SUBSTANCE, SOLID, SELF-HEATING	4.2		II	Category C	
3400	ORGANOMETALLIC SUBSTANCE, SOLID, SELF-HEATING	4.2		III	Category C	
3401	ALKALI METAL AMALGAM, SOLID	4.3		I	Category D	SG35
3402	ALKALINE EARTH METAL AMALGAM, SOLID	4.3		I	Category D	SG35
3403	POTASSIUM METAL ALLOYS, SOLID	4.3		I	Category D	SG35
3404	POTASSIUM SODIUM ALLOYS, SOLID	4.3		I	Category D	SG35
3405	BARIUM CHLORATE SOLUTION	5.1	6.1	II	Category A	SG38 SG49 SG62
3405	BARIUM CHLORATE SOLUTION	5.1	6.1	III	Category A	SG38 SG49 SG62
3406	BARIUM PERCHLORATE SOLUTION	5.1	6.1	II	Category A	SG38 SG49 SG62
3406	BARIUM PERCHLORATE SOLUTION	5.1	6.1	III	Category A	SG38 SG49 SG62
3407	CHLORATE AND MAGNESIUM CHLORIDE MIXTURE SOLUTION	5.1		II	Category A	SG38 SG49 SG62
3407	CHLORATE AND MAGNESIUM CHLORIDE MIXTURE SOLUTION	5.1		III	Category A	SG38 SG49 SG62
3408	LEAD PERCHLORATE SOLUTION	5.1	6.1P	II	Category A	SG38 SG49
3408	LEAD PERCHLORATE SOLUTION	5.1	6.1P	III	Category A	SG38 SG49
3409	CHLORONITROBENZENES, LIQUID	6.1		II	Category A	
3410	4-CHLORO-o-TOLUIDINE HYDROCHLORIDE SOLUTION	6.1		III	Category A	
3411	beta-NAPHTHYLAMINE SOLUTION	6.1		II	Category A	
3411	beta-NAPHTHYLAMINE SOLUTION	6.1		III	Category A	
3412	FORMIC ACID with not less than 10% but not more than 85% acid by mass	8		II	Category A SW2	
3412	FORMIC ACID with not less than 5% but less than 10% acid by mass	8		III	Category A SW2	
3413	POTASSIUM CYANIDE SOLUTION	6.1	P	I	Category B	SG35
3413	POTASSIUM CYANIDE SOLUTION	6.1	P	II	Category B	SG35
3413	POTASSIUM CYANIDE SOLUTION	6.1	P	III	Category A	SG35
3414	SODIUM CYANIDE SOLUTION	6.1	P	I	Category B	SG35
3414	SODIUM CYANIDE SOLUTION	6.1	P	II	Category B	SG35
3414	SODIUM CYANIDE SOLUTION	6.1	P	III	Category A	SG35
3415	SODIUM FLUORIDE SOLUTION	6.1		III	Category A	SG35
3416	CHLOROACETOPHENONE, LIQUID	6.1		II	Category D SW1 SW2 H2	

UN Number	PROPER SHIPPING NAME (Note: When there is more than one packing group or PSN the UN No. has been annotated with a, b, c)	Class or division	Subsidiary risk(s)	Packing Group	Stowage and Handling	Segregation
3417	XYLYL BROMIDE, SOLID	6.1		II	Category D SW2	
3418	2,4-TOLUYLENEDIAMINE SOLUTION	6.1		III	Category A	
3419	BORON TRIFLUORIDE ACETIC ACID COMPLEX, SOLID	8		II	Category A	
3420	BORON TRIFLUORIDE PROPIONIC ACID COMPLEX, SOLID	8		II	Category A	
3421	POTASSIUM HYDROGEN DIFLUORIDE SOLUTION	8	6.1	II	Category A SW1 SW2	SG35
3421	POTASSIUM HYDROGEN DIFLUORIDE SOLUTION	8	6.1	III	Category A SW1 SW2	SG35
3422	POTASSIUM FLUORIDE SOLUTION	6.1		III	Category A	SG35
3423	TETRAMETHYLAMMONIUM HYDROXIDE, SOLID	8		II	Category A	SG35
3424	AMMONIUM DINITRO-o-CRESOLATE SOLUTION	6.1	P	II	Category B	SG15 SG16 SG30 SG63
3424	AMMONIUM DINITRO-o-CRESOLATE SOLUTION	6.1	P	III	Category A	SG15 SG16 SG30 SG63
3425	BROMOACETIC ACID, SOLID	8		II	Category A	
3426	ACRYLAMIDE SOLUTION	6.1		III	Category A SW1 H2	
3427	CHLOROBENZYL CHLORIDES, SOLID	6.1		III	Category A	
3428	3-CHLORO-4-METHYLPHENYLISOCYANATE, SOLID	6.1		II	Category B SW2	
3429	CHLOROTOLUIDINES, LIQUID	6.1		III	Category A	
3430	XYLENOLS, LIQUID	6.1		II	Category A	
3431	NITROBENZOTRIFLUORIDES, SOLID	6.1		II	Category A SW2	
3432	POLYCHLORINATED BIPHENYLS, SOLID	9	P	II	Category A	SG50
3434	NITROCRESOLS, LIQUID	6.1		III	Category A	
3436	HEXAFLUOROACETONE HYDRATE, SOLID	6.1		II	Category B SW2	
3437	CHLOROCRESOLS, SOLID	6.1		II	Category A SW1 H2	
3438	alpha-METHYLBENZYL ALCOHOL, SOLID	6.1		III	Category A	
3439	NITRILES, TOXIC, SOLID, N.O.S.	6.1		I	Category B	SG35
3439	NITRILES, TOXIC, SOLID, N.O.S.	6.1		II	Category B	SG35
3439	NITRILES, TOXIC, SOLID, N.O.S.	6.1		III	Category A	SG35
3440	SELENIUM COMPOUND, LIQUID, N.O.S.	6.1		I	Category B	
3440	SELENIUM COMPOUND, LIQUID, N.O.S.	6.1		II	Category B	
3440	SELENIUM COMPOUND, LIQUID, N.O.S.	6.1		III	Category A	
3441	CHLORODINITROBENZENES, SOLID	6.1	P	II	Category A	SG15
3442	DICHLOROANILINES, SOLID	6.1	P	II	Category A SW2	
3443	DINITROBENZENES, SOLID	6.1		II	Category A	SG15
3444	NICOTINE HYDROCHLORIDE, SOLID	6.1		II	Category A	
3445	NICOTINE SULPHATE, SOLID	6.1		II	Category A	

UN Number	PROPER SHIPPING NAME (Note: When there is more than one packing group or PSN the UN No. has been annotated with a, b, c)	Class or division	Subsidiary risk(s)	Packing Group	Stowage and Handling	Segregation
3446	NITROTOLUENES, SOLID	6.1		II	Category A	
3447	NITROXYLENES, SOLID	6.1		II	Category A	
3448	TEAR GAS SUBSTANCE, SOLID, N.O.S.	6.1		I	Category D SW2	
3448	TEAR GAS SUBSTANCE, SOLID, N.O.S.	6.1		II	Category D SW2	
3449	BROMOBENZYL CYANIDES, SOLID	6.1		I	Category D SW1 SW2 H2	SG35
3450	DIPHENYLCHLOROARSINE, SOLID	6.1	P	I	Category D SW2	
3451	TOLUIDINES, SOLID	6.1		II	Category A	
3452	XYLIDINES, SOLID	6.1		II	Category A	
3453	PHOSPHORIC ACID, SOLID	8		III	Category A	
3454	DINITROTOLUENES, SOLID	6.1		II	Category A	
3455	CRESOLS, SOLID	6.1	8	II	Category B	
3456	NITROSYLSULPHURIC ACID, SOLID	8		II	Category D SW2	SG6 SG16 SG17 SG19
3457	CHLORONITROTOLUENES, SOLID	6.1	P	III	Category A	SG6 SG8 SG10 SG12
3458	NITROANISOLES, SOLID	6.1		III	Category A	
3459	NITROBROMOBENZENES, SOLID	6.1		III	Category A	
3460	N-ETHYLBENZYL TOLUIDINES, SOLID	6.1		III	Category A	
3462	TOXINS, EXTRACTED FROM LIVING SOURCES, SOLID, N.O.S.	6.1		I	Category B	
3462	TOXINS, EXTRACTED FROM LIVING SOURCES, SOLID, N.O.S.	6.1		II	Category B	
3462	TOXINS, EXTRACTED FROM LIVING SOURCES, SOLID, N.O.S.	6.1		III	Category A	
3463	PROPIONIC ACID with not less than 90% acid by mass	8	3	II	Category A	
3464	ORGANOPHOSPHORUS COMPOUND, TOXIC, SOLID, N.O.S.	6.1		I	Category B	
3464	ORGANOPHOSPHORUS COMPOUND, TOXIC, SOLID, N.O.S.	6.1		II	Category B	
3464	ORGANOPHOSPHORUS COMPOUND, TOXIC, SOLID, N.O.S.	6.1		III	Category A	
3465	ORGANOARSENIC COMPOUND, SOLID, N.O.S.	6.1		I	Category B	
3465	ORGANOARSENIC COMPOUND, SOLID, N.O.S.	6.1		II	Category B	
3465	ORGANOARSENIC COMPOUND, SOLID, N.O.S.	6.1		III	Category A	
3466	METAL CARBONYLS, SOLID, N.O.S.	6.1		I	Category D SW2	
3466	METAL CARBONYLS, SOLID, N.O.S.	6.1		II	Category D SW2	
3466	METAL CARBONYLS, SOLID, N.O.S.	6.1		III	Category D SW2	
3467	ORGANOMETALLIC COMPOUND, TOXIC, SOLID, N.O.S.	6.1		I	Category B	
3467	ORGANOMETALLIC COMPOUND, TOXIC, SOLID, N.O.S.	6.1		II	Category B	

UN Number	PROPER SHIPPING NAME (Note: When there is more than one packing group or PSN the UN No. has been annotated with a, b, c)	Class or division	Subsidiary risk(s)	Packing Group	Stowage and Handling	Segregation
3467	ORGANOMETALLIC COMPOUND, TOXIC, SOLID, N.O.S.	6.1		III	Category A	
3468	HYDROGEN IN A METAL HYDRIDE STORAGE SYSTEM or HYDROGEN IN A METAL HYDRIDE STORAGE SYSTEM	2.1			Category D	
3469	PAINT, FLAMMABLE, CORROSIVE (including paint, lacquer, enamel, stain, shellac, varnish,	3	8	I	Category E SW2	
3469	PAINT, FLAMMABLE, CORROSIVE (including paint, lacquer, enamel, stain, shellac, varnish,	3	8	II	Category B SW2	
3469	PAINT, FLAMMABLE, CORROSIVE (including paint, lacquer, enamel, stain, shellac, varnish,	3		III	Category A SW2	
3470	PAINT, CORROSIVE, FLAMMABLE (including paint, lacquer, enamel, stain, shellac, varnish,	8	3	II	Category B SW2	
3471	HYDROGEN DIFLUORIDES SOLUTION, N.O.S.	8	6.1	II	Category A SW1 SW2	SG35
3471	HYDROGEN DIFLUORIDES SOLUTION, N.O.S.	8	6.1	III	Category A SW1 SW2	SG35
3472	CROTONIC ACID, LIQUID	8		III	Category A SW1 H2	
3473	FUEL CELL CARTRIDGES or FUEL CELL CARTRIDGES CONTAINED IN EQUIPMENT or FUEL CELL CARTRID	3			Category A	
3474	1-HYDROXYBENZOTRIAZOLE MONOHYDRATE	4.1		I	Category D	SG7 SG30
3475	ETHANOL AND GASOLINE MIXTURE or ETHANOL AND MOTOR SPIRIT MIXTURE or ETHANOL AND PETROL MIXTURE, with more than 10% ethanol MIXTURE, with more than 10% ethanol	3		II	Category E	
3476	FUEL CELL CARTRIDGES or FUEL CELL CARTRIDGES CONTAINED IN EQUIPMENT or FUEL CELL CARTRIDGES PACKED WITH EQUIPMENT, containing water-reactive substances	4.3			Category A	
3477	FUEL CELL CARTRIDGES or FUEL CELL CARTRIDGES CONTAINED IN EQUIPMENT or FUEL CELL CARTRID	8			Category A	
3478	FUEL CELL CARTRIDGES or FUEL CELL CARTRIDGES CONTAINED IN EQUIPMENT or FUEL CELL CARTRIDGES PACKED WITH EQUIPMENT, containing liquefied flammable gas	2.1			Category B	
3479	FUEL CELL CARTRIDGES or FUEL CELL CARTRIDGES CONTAINED IN EQUIPMENT or FUEL CELL CARTRIDGES PACKED WITH EQUIPMENT, containing hydrogen in metal hydride	2.1			Category B	
3480	LITHIUM ION BATTERIES (including lithium ion polymer batteries)	9		II	Category A	
3481	LITHIUM ION BATTERIES CONTAINED IN EQUIPMENT or LITHIUM ION BATTERIES PACKED WITH EQUIPMENT (including lithium ion polymer batteries)	9		II	Category A	



UN Number	PROPER SHIPPING NAME (Note: When there is more than one packing group or PSN the UN No. has been annotated with a, b, c)	Class or division	Subsidiary risk(s)	Packing Group	Stowage and Handling	Segregation
3482	ALKALI METAL DISPERSION, FLAMMABLE or ALKALINE EARTH METAL DISPERSION, FLAMMABLE	4.3	3	I	Category D	SG35
3483	MOTOR FUEL ANTI-KNOCK MIXTURE, FLAMMABLE	6.1	3	I	Category D SW1 SW2	
3484	HYDRAZINE, AQUEOUS SOLUTION, FLAMMABLE with more than 37% hydrazine, by mass	8	"3/6.1	I	Category D SW2	SG5 SG8 SG35
3485	CALCIUM HYPOCHLORITE, DRY, CORROSIVE or CALCIUM HYPOCHLORITE MIXTURE, DRY, CORROSIVE with more than 39% available chlorine (8.8% available oxygen)	5.1	8	II	Category D SW1 SW11	SG35 SG38 SG49 SG53 SG60
3486	CALCIUM HYPOCHLORITE MIXTURE, DRY, CORROSIVE with more than 10% but not more than 39% available chlorine	5.1	8	III	Category D SW1 SW11	SG35 SG38 SG49 SG53 SG60
3487	CALCIUM HYPOCHLORITE, HYDRATED, CORROSIVE or CALCIUM HYPOCHLORITE, HYDRATED MIXTURE, CORROSIVE, with not less than 5.5% but not more than 16% water	5.1	8	II	Category D SW1 SW11	SG35 SG38 SG49 SG53 SG60
3487	CALCIUM HYPOCHLORITE, HYDRATED, CORROSIVE or CALCIUM HYPOCHLORITE, HYDRATED MIXTURE, CORROSIVE, with not less than 5.5% but not more than 16% water	5.1	8	III	Category D SW1 SW11	SG35 SG38 SG49 SG53 SG60
3488	TOXIC BY INHALATION LIQUID, FLAMMABLE, CORROSIVE, N.O.S. with an LC50 lower than or equal to 200 ml/m3 and saturated vapour concentration greater than or equal to 500 LC50	6.1	"3/8	I	Category D SW2	SG5 SG8
3489	TOXIC BY INHALATION LIQUID, FLAMMABLE, CORROSIVE, N.O.S. with an LC50 lower than or equal to 1000 ml/m3 and saturated vapour concentration greater than or equal to 10 LC50	6.1	"3/8	I	Category D SW2	SG5 SG8
3490	TOXIC BY INHALATION LIQUID, WATER-REACTIVE, FLAMMABLE, N.O.S. with an LC50 lower than or equal to 200 ml/m3 and saturated vapour concentration greater than or equal to 500 LC50	6.1	4.3/3	I	Category D SW2	SG5 SG7 SG13
3491	TOXIC BY INHALATION LIQUID, WATER-REACTIVE, FLAMMABLE, N.O.S. with an LC50 lower than or equal to 1000 ml/m3 and saturated vapour concentration greater than or equal to 10 LC50	6.1	4.3/3	I	Category D SW2	SG5 SG7 SG13
3494	PETROLEUM SOUR CRUDE OIL, FLAMMABLE, TOXIC	3		I	Category D SW2	
3494	PETROLEUM SOUR CRUDE OIL, FLAMMABLE, TOXIC	3		II	Category D SW2	
3494	PETROLEUM SOUR CRUDE OIL, FLAMMABLE, TOXIC	3		III	Category C SW2	
3495	IODINE	8	6.1	III	Category B SW2	SG37



UN Number	PROPER SHIPPING NAME (Note: When there is more than one packing group or PSN the UN No. has been annotated with a, b, c)	Class or division	Subsidiary risk(s)	Packing Group	Stowage and Handling	Segregation
3496	BATTERIES, NICKEL-METAL HYDRIDE	9			Category A SW1	
3497	KRILL MEAL	4.2		II	Category B SW27	SG65
3497	KRILL MEAL	4.2		III	Category A	
3498	IODINE MONOCHLORIDE, LIQUID	8		II	Category D SW2	SG6 SG16 SG17 SG19
3499	CAPACITOR, electric double layer (with an energy storage capacity greater than 0.3 Wh)	9			Category A	
3500	CHEMICAL UNDER PRESSURE, N.O.S.	2.2			Category B	
3501	CHEMICAL UNDER PRESSURE, FLAMMABLE, N.O.S.	2.1			Category D SW2	
3502	CHEMICAL UNDER PRESSURE, TOXIC, N.O.S.	2.2	6.1		Category D SW2	
3503	CHEMICAL UNDER PRESSURE, CORROSIVE, N.O.S.	2.2	8		Category D SW2	
3504	CHEMICAL UNDER PRESSURE, FLAMMABLE, TOXIC, N.O.S.	2.1	6.1		Category D SW2	
3505	CHEMICAL UNDER PRESSURE, FLAMMABLE, CORROSIVE, N.O.S.	2.1	8		Category D SW2	
3506	MERCURY CONTAINED IN MANUFACTURED ARTICLES	8	6.1	III	Category B SW2	SG24

In the dangerous goods list, amend the following entries as follows:

0005	in column (1) and in column (18), the first existing row in the dangerous goods list "0005" is replaced with "0004".
0082	in column (9), delete "PP65".
0241	in column (9), delete "PP65".
0331	in column (9), delete "PP65".
0332	in column (9), delete "PP65".
0222	Amend column (2) to read "AMMONIUM NITRATE". In column (6) insert "370". In column (10) insert "IBC100"; In column (11), insert "B2, B3, B17".
0503	In column (2), amend name to read: "SAFETY DEVICES, PYROTECHNIC".
1005	in column (4) insert "P"
1008	In column (6), replace "-" with "373"
1043	in column (7b) amend the code to read "E0".
1044	in column (9), insert "PP91".
1051 PG I	in column (7b) amend the code to read "E0".
1082	in column (2), add "(REFRIGERANT GAS R 1113)" at the end.
1089 PG I	in column (7b) amend the code to read "E0".
1098	in column (4) insert "P"
1183 PG I	in column (16a) insert "H1" and in column (16b) "SG25" and "SG26"
1206	in column (4) insert "P".
1210	in column (6), insert "367".
1228 PG II	in column (7b) amend the code to read "E0".
1242 PG I	in column (16a) insert "H1" and in column (16b) "SG25" and "SG26"
1259 PG I	in column (7b) amend the code to read "E0".
1261 PG II	in column (7b) amend the code to read "E0".
1262	in column (4) insert "P"
1263	in column (6), insert "367".
1272	in column (4) insert "P"
1278 PG II	in column (7b) amend the code to read "E0".
1295 PG I	in column (16)a insert "H1" and in column (16b) "SG25" and "SG26"
1299	in column (4) insert "P"

1308 PG I	in column (7b) amend the code to read "E0".
1309 PG II	in column (16a) insert "H1" and in column (16b) "SG25" and "SG26"
1309 PG III	in column (16a) insert "H1" and in column (16b) "SG25" and "SG26"
1323	in column (16a) insert "H1" and in column (16b) "SG25" and "SG26"
1331 PG III	in column (7b) amend the code to read "E0".
1333 PG II	in column (16a) insert "H1" and in column (16b) "SG25" and "SG26"
1334	in column (4) insert "P"
1339 PG II	in column (16a) insert "H1" and in column (16b) "SG25" and "SG26"
1340 PG II	in column (16a) insert "H1" and in column (16b) "SG26"
1343 PG II	in column (16a) insert "H1" and in column (16b) "SG25" and "SG26"
1357	in column (6) delete "919"
1358 PG II	in column (16a) insert "H1" and in column (16b) "SG25" and "SG26"
1360 PG I	in column (16a) insert "H1" and in column (16b) "SG26"
1361 PG II and PG III	in column (7b) amend the code to read "E0".
1363 PG III	in column (7b) amend the code to read "E0".
1364 PG III	in column (7b) amend the code to read "E0".
1365 PG III	in column (7b) amend the code to read "E0".
1373 PG III	in column (7b) amend the code to read "E0".
1376 PG III	in column (7b) amend the code to read "E0"; in column (16a) insert "H1" and in column (16b) "SG26"
1378 PG II	in column (7b) amend the code to read "E0".
1379 PG III	in column (7b) amend the code to read "E0".
1380 PG I	in column (16a) insert "H1" and in column (16b) "SG26"
1383 PG I	in column (16a) insert "H1" and in column (16b) "SG26"
1386 PG III	in column (7b) amend the code to read "E0".
1389 PG I	in column (16a) insert "H1" and in column (16b) "SG26"
1390 PG II	in column (16a) insert "H1" and in column (16b) "SG26"

1391 PG I	in column (16a) insert "H1" and in column (16b) "SG26"
1392 PG I	in column (16a) insert "H1" and in column (16b) "SG26"
1393 PG II	in column (16a) insert "H1" and in column (16b) "SG26"
1394 PG II	in column (16a) insert "H1" and in column (16b) "SG26"
1395 PG II	in column (16a) insert "H1" and in column (16b) "SG26"
1396 PG II	in column (16a) insert "H1" and in column (16b) "SG26"
1396 PG III	in column (16a) insert "H1" and in column (16b) "SG26"
1397 PG I	in column (16a) insert "H1" and in column (16b) "SG26"
1398 PG III	in column (16a) insert "H1" and in column (16b) "SG26"
1400 PG II	in column (16a) insert "H1" and in column (16b) "SG26"
1401 PG II	in column (16a) insert "H1" and in column (16b) "SG26"
1402 PG I	in column (16a) insert "H1" and in column (16b) "SG26"
1402 PG II	in column (16a) insert "H1" and in column (16b) "SG26"
1403 PG III	in column (16a) insert "H1" and in column (16b) "SG26"
1404 PG I	in column (16a) insert "H1" and in column (16b) "SG26"
1405 PG II	in column (16a) insert "H1" and in column (16b) "SG26"
1405 PG III	in column (16a) insert "H1" and in column (16b) "SG26"
1407 PG I	in column (16a) insert "H1" and in column (16b) "SG26"
1408 PG III	in column (16a) insert "H1" and in column (16b) "SG26"
1409 PG I	in column (16a) insert "H1" and in column (16b) "SG26"
1409 PG II	in column (16a) insert "H1" and in column (16b) "SG26"
1410 PG I	in column (16a) insert "H1" and in column (16b) "SG26"
1411 PG I	in column (16a) insert "H1" and in column (16b) "SG26"
1413 PG I	in column (16a) insert "H1" and in column (16b) "SG26"
1414 PG I	in column (16a) insert "H1" and in column (16b) "SG26"

1415 PG I	in column (16a) insert "H1" and in column (16b) "SG26"
1417 PG II	in column (16a) insert "H1" and in column (16b) "SG26"
1418 PG I	in column (16a) insert "H1" and in column (16b) "SG26"
1418 PG II and PG III	in column (16a) insert "H1" and in column (16b) "SG26"
1419 PG I	in column (16a) insert "H1" and in column (16b) "SG26"
1420 PG I	in column (16a) insert "H1" and in column (16b) "SG26"
1421 PG I	in column (16a) insert "H1" and in column (16b) "SG26"
1422 PG I	in column (16a) insert "H1" and in column (16b) "SG26"
1423 PG I	in column (16a) insert "H1" and in column (16b) "SG26"
1426 PG I	in column (16a) insert "H1" and in column (16b) "SG26"
1427 PG I	in column (16a) insert "H1" and in column (16b) "SG26"
1428 PG I	in column (16a) insert "H1" and in column (16b) "SG26"
1432 PG I	in column (16a) insert "H1" and in column (16b) "SG26"
1433 PG I	in column (16a) insert "H1" and in column (16b) "SG26"
1435 PG III	in column (16a) insert "H1" and in column (16b) "SG26"
1436 PG I, II and PG III	in column (16a) insert "H1" and in column (16b) "SG26"
1449 PG II	in column (16a) replace "Category A" with "Category C"; in column (16a) insert "H1" and in column (16b) "SG26"
1457 PG II	in column (16a) replace "Category A" with "Category C" and insert "H1"; in column (16b) "SG26"
1472 PG II	in column (16a) replace "Category A" with "Category C" and insert "H1"; in column (16b) "SG26"
1476 PG II	in column (16a) replace "Category A" with "Category C" and insert "H1"; in column (16b) "SG26"
1483 PG II and III	in column (16a) replace "Category A" with "Category C" and insert "H1"; in column (16b) "SG26"
1491 PG I	in column (16a) replace "Category B" with "Category C" and insert "H1"; in column (16b) "SG26"

1504 PG I	in column (16a) replace "Category B" with "Category C" and insert "H1"; in column (16b) "SG26"
1509 PG II	in column (16a) replace "Category A" with "Category C" and insert "H1"; in column (16b) "SG26"
1516 PG II	in column (16a) replace "Category A" with "Category C" and insert "H1"; in column (16b) "SG26"
1545 PG II	in column (7b) amend the code to read "E0".
1547	in column (4) insert "P"
1560 PG I	in column (7b) amend the code to read "E0".
1567 PG II	in column (16a) insert "H1" and in column (16b) "SG25" and "SG26"
1569 PG II	in column (7b) amend the code to read "E0".
1583 all packing groups	in column (7b) amend the code to read "E0".
1600	in column (4) insert "P"
1603 PG II	in column (7b) amend the code to read "E0".
1613 PG I	in column (7b) amend the code to read "E0".
1614 PG I	in column (7b) amend the code to read "E0".
1649 PG I	in column (7b) amend the code to read "E0".
1672 PG I	in column (7b) amend the code to read "E0".
1693 PG I and PG II	in column (7b) amend the code to read "E0".
1694 PG I	in column (7b) amend the code to read "E0".
1697 PG II	in column (7b) amend the code to read "E0".
1698 PG I	in column (7b) amend the code to read "E0".
1699 PG I	in column (7b) amend the code to read "E0".
1700	in column (5), delete the packing group.
1701 PG II	in column (7b) amend the code to read "E0".
1708	in column (4) insert "P"
1714 PG I	in column (16a) insert "H1" and in column (16b) "SG26"
1722 PG I	in column (7b) amend the code to read "E0".
1732 PG II	in column (7b) amend the code to read "E0".
1748	in column (4) insert "P"



1792 PG II	in column (7b) amend the code to read "E0".
1796 PG II	in colum (7b) amend the code to read "E0".
1802 PG II	in column (7b) amend the code to read "E0".
1806 PG II	in column (7b) amend the code to read "E0".
1808 PG II	in column (7b) amend the code to read "E0".
1826 PG II	in column (7b) amend the code to read "E0".
1832 PG II	in column (7b) amend the code to read "E0".
1837 PG II	in column (7b) amend the code to read "E0".
1840	in column (4) insert "P"
1854 PG I	in column (16a) insert "H1" and in column (16b) "SG26"
1855 PG I	in column (16a) insert "H1" and in column (16b) "SG26"
1868 PG II	in column (7b) amend the code to read "E0".
1869 PG III	in column (16a) insert "H1" and in column (16b) "SG25" and "SG26"
1870 PG I	in column (16a) insert "H1" and in column (16b) "SG26"
1889 PG I	in column (7b) amend the code to read "E0".
1906 PG II	in column (7b) amend the code to read "E0".
1920	in column (4) insert "P"
1928 PG I	in column (16a) insert "H1" and in column (16b) "SG26"
1932 PG III	in column (7b) amend the code to read "E0"; in column (16a) insert "H1" and in column (16b) "SG26"
1939 PG II	in colum (7b) amend the code to read "E0".
1942	Amend column (2) to read "AMMONIUM NITRATE with not more than 0.2% combustible substances, including any organic substance calculated as carbon, to the exclusion of any other added substance".
2002 PG III	in column (7b) amend the code to read "E0".
2004 PG II	in column (16a) insert "H1" and in column (16b) "SG26"
2006 PG III	in column (7b) amend the code to read "E0".
2008 PG II and III	in column (16a) insert "H1" and in column (16b) "SG26"
2009 PG III	in column (16a) insert "H1" and in column (16b) "SG26"

2010 PG I	in column (16a) insert "H1" and in column (16b) "SG26"
2011 PG I	in column (16a) insert "H1" and in column (16b) "SG26"
2012 PG I	in column (16a) insert "H1" and in column (16b) "SG26"
2013 PG I	in column (16a) insert "H1" and in column (16b) "SG26"
2016	in column (5), delete the packing group.
2017	in column (5), delete the packing group.
2030 PG II	in column (7b) amend the code to read "E0".
2038	in column (4) insert "P"
2073	in column (7b) amend the code to read "E0". in column (4) insert "P"
2208	in column (4) insert "P"
2210 PG III	in column (16a) insert "H1" and in column (16b) "SG26"
2212 PG II	in column (2) amend the name to read "ASBESTOS, AMPHIBOLE (amosite, tremolite, actinolite, anthophyllite, crocidolite)"; in column (6) insert "274"; in column (7b) amend the code to read "E0"; in column (16a) insert "H4"; in column (17) delete the fifth sentence "Crocidolite (blue asbestos) should be regarded as the most hazardous type of asbestos." and the last two sentences "If cleaning of cargo spaces must be carried out at sea, the safety procedures followed and standard of equipment used must be at least as effective as those which would be employed in a port. Until such cleaning is undertaken, the cargo spaces in which the asbestos has been carried should be closed and access to those spaces should be prohibited."
2217 PG III	in column (7b) amend the code to read "E0".
2218	in column (4) insert "P"
2241	in column (4) insert "P"
2249 PG I	in column (7b) amend the code to read "E0".
2254 PG III	in column (7b) amend the code to read "E0".
2257 PG I	in column (16a) insert "H1" and in column (16b) "SG26"
2295 PG I	in column (7b) amend the code to read "E0".
2304	in column (4) insert "P"
2325	in column (4) insert "P"
2331	in column (4) insert "P"

2363 PG I	in colum (7b) amend the code to read "E0".
2368	in column (4) insert "P"
2381 PG II	in column (4) insert "P" in colum (7b) amend the code to read "E0".
2404 PG II	in colum (7b) amend the code to read "E0".
2438 PG I	in column (7b) amend the code to read "E0".
2441 PG I	in column (16a) insert "H1" and in column (16b) "SG26"
2442 PG II	in column (7b) amend the code to read "E0".
2443 PG II	in column (7b) amend the code to read "E0".
2463 PG I	in column (16a) insert "H1" and in column (16b) "SG26"
2466 PG I	in column (16a) replace "Category E" with "Category D" and insert "H1"; in column (16b) "SG26"
2545 PG I, PG II and III	in column (16a) insert "H1" and in column (16b) "SG26"
2546 PG I, PG II and III	in column (16a) insert "H1" and in column (16b) "SG26"
2547 PG I	in column (16a) replace "Category E" with "Category D" and insert "H1"; in column (16b) "SG26"
2558 PG I	in colum (7b) amend the code to read "E0".
2590	in column (2) amend the name to read "ASBESTOS, CHRYSOTILE"; In column (16a) insert "H4" in column (17) delete the last two sentences "If cleaning of cargo spaces must be carried out at sea, the safety procedures followed and standard of equipment used must be at least as effective as those which would be employed in a port. Until such cleaning is undertaken, the cargo spaces in which the asbestos has been carried should be closed and access to those spaces should be prohibited."
2624 PG II	in column (16a) insert "H1" and in column (16b) "SG26"
2626 PG II	in column (7b) amend the code to read "E0".
2672	in column (4) insert "P"
2691 PG II	in column (7b) amend the code to read "E0".
2709	in column (4) insert "P".
2740 PG I	in column (7b) amend the code to read "E0".
2743 PG II	in column (7b) amend the code to read "E0".

2749 PG I	in column (7b) amend the code to read "E0".
2793 PG III	in column (16a) insert "H1" and in column (16b) "SG26"
2798 PG II	in column (7b) amend the code to read "E0".
2799 PG II	in column (7b) amend the code to read "E0".
2805 PG II	in column (16a) insert "H1" and in column (16b) "SG26"
2813 PG I, II and PG III	in column (16a) insert "H1" and in column (16b) "SG26"
2826 PG II	in column (7b) amend the code to read "E0".
2830 PG II	in column (16a) insert "H1" and in column (16b) "SG26"
2835 PG II	in column (7b) amend the code to read "E0". in column (16a) insert "H1" and in column (16b) "SG26"
2844 PG III	in column (16a) insert "H1" and in column (16b) "SG26"
2845 PG I	in column (16a) insert "H1" and in column (16b) "SG26"
2846 PG I	in column (16a) insert "H1" and in column (16b) "SG26"
2850	in column (4) insert "P"
2858 PG III	in column (16a) insert "H1" and in column (16b) "SG25" and "SG26"
2870 PG I (both entries)	in column (16a) insert "H1" and in column (16b) "SG26"
2878 PG III	in column (16a) insert "H1" and in column (16b) "SG25" and "SG26"
2880 all packing groups	in column (4) insert "P"
2881 PG II	in column (7b) amend the code to read "E0".
2881 PG I, II and PG III	in column (16a) insert "H1" and in column (16b) "SG25" and "SG26"
2910	in column (6) delete "325" and insert "368"
2950 PG III	in column (16a) insert "H1" and in column (16b) "SG26"
2956 PG III	in column (7b) amend the code to read "E0".
2965 PG I	in column (16a) insert "H1" and in column (16b) "SG25" and "SG26"
2968 PG III	in column (16a) insert "H1" and in column (16b) "SG26"

2977	in column (6) delete special provision "172".
2978	in column (6) delete special provision "172".
2988	in column (16a) insert "H1" and in column (16b) "SG25" and "SG26"
3048 PG I	in column (7b) amend the code to read "E0".
3066	in column (6), insert "367".
3077	in column (6), insert "969".
3078 PG II	in column (16a) insert "H1" and in column (16b) "SG26"
3082	in column (6) insert "969".
3089 PG II	in column (16a) insert "H1" and in column (16b) "SG25" and "SG26"
3089 PG III	in column (10) replace "IBC 06" by "IBC 08"; in column (11) insert "B2 and B4" in column (16a) insert "H1" and in column (16b) "SG25" and "SG26"
3090	in column (5), delete the packing group; in column (6) delete "957" and insert "376" and "377"; in column (8) insert "P908, P909", "LP903" and "LP904"; in column (16a) insert "SW19".
3091	in column (5), delete the packing group, in column (6) delete "957" and insert "376" and "377", in column (8) insert "P908, P909", "LP903" and "LP904" in column (16a) insert "SW19".
3094 PG I and PG II	in column (16a) insert "H1" and in column (16b) "SG26"
3096 PG I and PG II	in column (16a) insert "H1" and in column (16b) "SG26"
3097 PG II and PG III	in column (7b) amend the code to read "E0".
3100 PG II	in column (7b) amend the code to read "E0".
3121 PG I and PG II	in column (16a) insert "H1" and in column (16b) "SG26"
3121 PG II	in column (7b) amend the code to read "E0".
3122 PG I	in column (7b) amend the code to read "E0".
3123 PG I and PG II	in column (16a) insert "H1" and in column (16b) "SG26"
3123 PG I	in column (7b) amend the code to read "E0".
3125 PG I and II	in column (16a) insert "H1" and in column (16b) "SG26"

3127 PG II and PG III	in column (7b) amend the code to read "E0".
3129 PG I, PG II and PG III	in column (16a) insert "H1" and in column (16b) "SG26"
3129 PG II	in column (7b) amend the code to read "E0".
3130 PG I, PG II and PG III	in column (16a) insert "H1" and in column (16b) "SG26"
3130 PG II	in column (7b) amend the code to read "E0".
3131 PG I, II and PG III	in column (16a) insert "H1" and in column (16b) "SG26"
3132 PG I, II and PG III	in column (16a) insert "H1" and in column (16b) "SG26"
3133 PG II and PG III	in column (7b) amend the code to read "E0". in column (16a) insert "H1" and in column (16b) "SG26"
3134 PG I, II and PG III	in column (16a) insert "H1" and in column (16b) "SG26"
3135 PG I, II and PG III	in column (16a) insert "H1" and in column (16b) "SG26"
3137 PG I	in column (16a) insert "H1" and in column (16b) "SG25" and "SG26"
3148 PG I, PG II and PG III	in column (16a) insert "H1" and in column (16b) "SG26"
3164	in column (6), insert "371".
3166	in column (6) insert "SP 970".
3170 PG II and PG III	in column (16a) insert "H1" and in column (16b) "SG26"
3189 PG II and III	in column (16a) insert "H1" and in column (16b) "SG26"
3194 PG I	in column (16a) insert "H1" and in column (16b) "SG26"
3200 PG I	in column (16a) insert "H1" and in column (16b) "SG26"
3208 PG I and III	in column (16a) insert "H1" and in column (16b) "SG26"



3208 PG II	in column (7b) amend the code to read "E0"; in column (16a) insert "H1" and in column (16b) "SG26"
3209 PG I, PG II and PG III	in column (16a) insert "H1" and in column (16b) "SG26"
3242 PG II	in column (7b) amend the code to read "E0".
3251 PG III	in column (7b) amend the code to read "E0".
3268	in column (2), amend the name to read: "SAFETY DEVICES, electrically initiated" and in column (5), delete the packing group.
3292	in column (5), delete the packing group; in column (16a) insert "H1" and in column (16b) "SG26"
3294 PG I	in column (7b) amend the code to read "E0".
3315 PG I	in column (7b) amend the code to read "E0".
3316	delete the existing entry (note: the replacement for this entry is shown in the table for new entries)
3318	in column (4) insert "P"
3336 PG I	in column (7b) amend the code to read "E0".
3356	in column (5), delete the packing group.
3375	In column (8), replace "P099" by "P505"; in column (10) replace "IBC99" by "IBC02" and in column (11), insert "B16".
3378 PG II	In column (6) delete "967". (Amendment applies to the printed version only)
3385 PG I	in column (16a) insert "H1" and in column (16b) "SG26"
3386 PG I	in column (16a) insert "H1" and in column (16b) "SG26"
3391 PG I	in column (16a) insert "H1" and in column (16b) "SG26"
3392 PG I	in column (16a) insert "H1" and in column (16b) "SG26"
3393 PG I	in column (14) Insert "TP41". in column (16a) insert "H1" and in column (16b) "SG26"
3394 PG I	in column (14) Insert "TP41"; in column (16a) insert "H1" and in column (16b) "SG26"
3395 all packing groups	in column (14) Insert "TP41"; in column (16a) insert "H1" and in column (16b) "SG26"
3396 all packing groups	in column (14) Insert "TP41"; in column (16a) insert "H1" and in column (16b) "SG26"

3397 all packing groups	in column (14) Insert "TP41"; in column (16a) insert "H1" and in column (16b) "SG26"
3398 all packing groups	in column (14) Insert "TP41"; in column (16a) insert "H1" and in column (16b) "SG26"
3399 all packing groups	in column (14) Insert "TP41"; in column (16a) insert "H1" and in column (16b) "SG26"
3401 PG I	in column (16a) insert "H1" and in column (16b) "SG26"
3402 PG I	in column (16a) insert "H1" and in column (16b) "SG26"
3403 PG I	in column (16a) insert "H1" and in column (16b) "SG26"
3404 PG I	in column (16a) insert "H1" and in column (16b) "SG26"
3416 PG II	in column (7b) amend the code to read "E0".
3422	In column (15) replace "S-B" with "S-A".
3448 PG I and PG II	in column (7b) amend the code to read "E0".
3450 PG I	in column (7b) amend the code to read "E0".
3451	in column (4) insert "P"
3454	in column (4) insert "P"
3469	in column (6), insert "367".
3470	in column (6), insert "367".
3476	in column (16a) insert "H1" and in column (16b) "SG26"
3480	in column (5), delete the packing group; in column (6) delete "957" and insert "376" and "377"; in column (8) insert "P908, P909", "LP903" and "LP904"; in column (16a) insert "SW19".
3481	in column (5), delete the packing group; in column (6) delete "957" and insert "376" and "377"; in column (8) insert "P908, P909", "LP903" and "LP904" in column (16) insert "SW19".
3482 PG I	in column (16a) insert "H1" and in column (16b) "SG26"
3483 PG I	in column (7b) amend the code to read "E0"
3485	in column (4) insert "P"
3486	in column (4) insert "P"

3487 all packing groups	in column (4) insert "P"
3490 PG I	in column (16a) insert "H1" and in column (16b) "SG25" and "SG26"
3491 PG I	in column (16a) insert "H1" and in column (16b) "SG25" and "SG26"
3498 PG II	in column (7b) amend the code to read "E0"
3499	In column (2) amend the proper shipping name to read as follows: "CAPACITOR, ELECTRIC DOUBLE LAYER (with an energy storage capacity greater than 0.3Wh)"
3506	in column (5), delete the packing group.

3.2.1 Dangerous Goods List

(1)	(2)	(3)	(4)	(5)	(6)	(7a)	(7b)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16a)	(16b)	(17)
3316		9	-	II	251 340	See SP 251	See SP 340	P901	-	-	-	-	-	-	F-A, S-P	Category A.		-
3316	CHEMICAL KIT or FIRST AID KIT	9		III	251 340	See SP 251	See SP 340	P901	-	-	-	-	-	-	F-A, S-P	Category A.		-
3507	URANIUM HEXAFLUORIDE, RADIOACTIVE MATERIAL, EXCEPTED PACKAGE, less than 0.1 kg per package, non-fissile or fissile-excepted	8	7	I	317 369	0	E0	P805	-	-	-	-	-	-	<u>F-I, S-S</u>	Category A, SW12		See 1.5.1.
3508	CAPACITOR, ASYMMETRIC (with an energy storage capacity greater than 0.3Wh)	9	-	-	372	0	E0	P003	-	-	-	-	-	-	--	Category A		Articles intended to store energy containing positive and negative electrodes comprised of different materials and an electrolyte. Asymmetric capacitors may be transported in a charged state.
3509	PACKAGING DISCARDED, EMPTY, UNCLEANED	9			968	0	E0	-	-	-	-	-	-	-	--	-		This entry shall not be used for sea transport. Discarded packaging shall meet the requirements of 4.1.1.11. Discarded packaging means packagings, large packagings or intermediate bulk containers (IBC), or parts thereof, which have contained dangerous goods, other than radioactive material, which are transported for disposal, recycling or recovery of their material, other than reconditioning, repair, routine maintenance, remanufacturing or reuse, and which have been emptied to the extent that only residues of dangerous goods adhering to the packaging parts are present.
3510	ADSORBED GAS, FLAMMABLE, N.O.S.	2.1	-	-	274	0	E0	P208	-	-	-	-	-	-	F-D, S-U	Category D. SW2		-
3511	ADSORBED GAS, N.O.S.	2.2		-	274		E0	P208	-	-	-	-	-	-	F-C, S-V	Category A.		-
3512	ADSORBED GAS, TOXIC, N.O.S.	2.3		-	274	0	E0	P208	-	-	-	-	-	-	F-C, S-U	Category D. SW2		-
3513	ADSORBED GAS, OXIDIZING, N.O.S.	2.2	5.1	-	274	0	E0	P208	-	-	-	-	-	-	<u>F-C, S-W</u>	Category D.		-
3514	ADSORBED GAS, TOXIC, FLAMMABLE, N.O.S.	2.3	2.1	-	274	0	E0	P208	-	-	-	-	-	-	F-D, S,-U	Category D. SW2		-
3515	ADSORBED GAS, TOXIC, OXIDIZING, N.O.S.	2.3	5.1	-	274	0	E0	P208	-	-	-	-	-	-	<u>F-C, S-W</u>	Category D. SW2		-
3516	ADSORBED GAS, TOXIC, CORROSIVE, N.O.S.	2.3	8	-	274	0	E0	P208	-	-	-	-	-	-	F-C, S-U	Category D. SW2		-
3517	ADSORBED GAS, TOXIC, FLAMMABLE, CORROSIVE, N.O.S.	2.3	2.1 8	-	274	0	E0	P208	-	-	-	-	-	-	F-D, S-U	Category D. SW2	SG4 SG9	-

(1)	(2)	(3)	(4)	(5)	(6)	(7a)	(7b)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16a)	(16b)	(17)
3518	ADSORBED GAS, TOXIC, OXIDIZING, CORROSIVE, N.O.S.	2.3	5.1 8	-	274	0	E0	P208	-	-	-	-	-	-	F-C, S-W	Category D. SW2	SG6 SG19	-
3519	BORON TRIFLUORIDE, ADSORBED	2.3	8	-		0	E0	P208	-	-	-	-	-	-	F-C, S-U	Category D. SW2		Non-flammable, toxic and corrosive gas. Forms dense white corrosive fumes in moist air. Reacts violently with water, evolving hydrogen fluoride, an irritating and corrosive gas apparent as white fumes. In the presence of moisture, highly corrosive to glass and most metals. Much heavier than air (2.35). Highly irritating to skin, eyes and mucous membranes.
3520	CHLORINE, ADSORBED	2.3	5.1 8	-		0	E0	P208	-	-	-	-	-	-	F-C, S-W	Category D. SW2	SG6 SG19	Non-flammable, toxic and corrosive yellow gas with a pungent odour. Corrosive to glass and to most metals. Much heavier than air (2.4). Highly irritating to skin, eyes and mucous membranes. Powerful oxidant which may cause fire.
3521	SILICON TETRAFLUORIDE, ADSORBED	2.3	8	-		0	E0	P208	-	-	-	-	-	-	F-C, S-U	Category D. SW2		Non-flammable, toxic and corrosive gas with a pungent odour. Corrosive to metals. In moist air, produces hydrogen fluoride. Much heavier than air (3.6). Highly irritating to skin, eyes and mucous membranes.
3522	ARSINE, ADSORBED	2.3	2.1	-		0	E0	P208	-	-	-	-	-	-	F-D, S-U	Category D. SW2.		Flammable, toxic, colourless gas with a garlic odour. Explosive limits: 3.9% to 77.8%. Much heavier than air (2.8).
3523	GERMANE, ADSORBED	2.3	2.1	-		0	E0	P208	-	-	-	-	-	-	F-D, S-U	Category D. SW2		Flammable, toxic, colourless gas with a pungent odour. Much heavier than air (2.6)
3524	PHOSPHORUS PENTAFLUORIDE, ADSORBED	2.3	8	-		0	E0	P208	-	-	-	-	-	-	F-C, S-U	Category D. SW2		Non-flammable, toxic and corrosive gas with an irritating odour. Reacts with water or moist air to produce toxic and corrosive fumes. Corrosive to glass and to most metals. Much heavier than air (4.3). Highly irritating to skin, eyes and mucous membranes.
3525	PHOSPHINE, ADSORBED	2.3	2.1	-		0	E0	P208	-	-	-	-	-	-	F-D, S-U	Category D. SW2		Flammable, toxic, colourless gas with a garlic odour. Ignites spontaneously in air. Heavier than air (1.2). Irritating to skin, eyes and mucous membranes.
3526	HYDROGEN SELENIDE, ADSORBED	2.3	2.1	-		0	E0	P208	-	-	-	-	-	-	F-D, S-U	Category D. SW2		Flammable, toxic, colourless gas with a disagreeable odour. Much heavier than air (2.8). Highly irritating to skin, eyes and mucous membranes.

### Chapter 3.3 – Special provisions applicable to certain substances, materials or articles

Amend the following Special Provisions as indicated hereunder:

SP 66 Amend to read as follows:

"Cinnabar is not subject to the provisions of this Code".

SP 122 At the end, add: ", 4.1.4.2 packing instruction IBC520 and 4.2.5.2.6 portable tank instruction T23."

SP 135 Amend to read as follows:

"135 The dihydrated sodium salt of dichloroisocyanuric acid does not meet the criteria for inclusion in Class 5.1 and is not subject to the provisions of this Code unless meeting the criteria for inclusion in another Class or Division."

SP 172 Amend to read as follows:

"172 Where a radioactive material has (a) subsidiary risk(s):

- .1 The substance shall be allocated to Packing Group I, II or III, if appropriate, by application of the packing group criteria provided in part 2 corresponding to the nature of the predominant subsidiary risk;
- .2 Packages shall be labelled with subsidiary risk labels corresponding to each subsidiary risk exhibited by the material; corresponding placards shall be affixed to cargo transport units in accordance with the relevant provisions of 5.3.1;
- .3 For the purposes of documentation and package marking, the proper shipping name shall be supplemented with the name of the constituents which most predominantly contribute to this (these) subsidiary risk(s) and which shall be enclosed in parenthesis;
- .4 The dangerous goods transport document shall indicate the subsidiary class or division and, where assigned the packing group as required by 5.4.1.4.1.4 and 5.4.1.4.1.5.

For packing, see also 4.1.9.1.5."

SP 225 At the end, add:

"Fire extinguishers shall be manufactured, tested, approved and labelled according to the provisions applied in the country of manufacture. Fire extinguishers under this entry include:

- .1 portable fire extinguishers for manual handling and operation;
- .2 fire extinguishers for installation in aircraft;

- .3 fire extinguishers mounted on wheels for manual handling;
- .4 fire extinguishing equipment or machinery mounted on wheels or wheeled platforms or units transported similar to (small) trailers, and
- .5 fire extinguishers composed of a non-rollable pressure drum and equipment, and handled e.g. by fork lift or crane when loaded or unloaded."

SP 235 Amend to read as follows:

"235 This entry applies to articles which contain Class 1 explosive substances and which may also contain dangerous goods of other classes. These articles are used to enhance safety in vehicles, vessels or aircraft – e.g. air bag inflators, air bag modules, seat-belt pretensioners, and pyromechanical devices."

SP 251 Insert the following new third paragraph after "to any individual substance in the kit":

"Where the kit contains only dangerous goods to which no packing group is assigned, no packing group need be indicated on the dangerous goods transport document."

SP 280 Amend to read as follows:

"280 This entry applies to safety devices for vehicles, vessels or aircraft, e.g. air bag inflators, air bag modules, seat-belt pretensioners, and pyromechanical devices, which contain dangerous goods of Class 1 or of other classes, when transported as component parts and if these articles as presented for transport have been tested in accordance with Test Series 6(c) of Part 1 of the Manual of Tests and Criteria, with no explosion of the device, no fragmentation of device casing or pressure receptacle, and no projection hazard nor thermal effect which would significantly hinder fire-fighting or emergency response efforts in the immediate vicinity. This entry does not apply to life saving appliances described in special provision 296 (UN Nos. 2990 and 3072)."

SP 289 Amend to read as follows:

"289 Safety devices, electrically initiated and safety devices, pyrotechnic installed in vehicles, vessels or aircraft or in completed components such as steering columns, door panels, seats, etc. are not subject to the provisions of this Code."

SP 306 Amend to read as follows:

"306 This entry may only be used for substances that are too insensitive for acceptance into Class 1 when tested in accordance with Test Series 2 (see Manual of Tests and Criteria, Part I)."

SP 309 Amend the last sentence to read as follows:

"Substances shall satisfactorily pass Tests 8(a), (b) and (c) of Test Series 8 of the Manual of Tests and Criteria, Part I, Section 18 and be approved by the competent authority."



SP 310 At the end, include a new "Note" to read as follows:

"For damage or defective lithium batteries and cells see SP 376"

SP 361 At the end of subparagraph .5 insert "except those manufactured before 1 January 2014;"

SP 363 In subparagraph .3, replace "loaded in an orientation" with "oriented"

SP 919 is deleted.

SP 957 Is deleted.

SP 961 Replace existing 961 with the following:

"SP 961 Internal combustion engines, fuel cell engines, vehicles, and battery-powered equipment are not subject to the provisions of this Code if any of the following conditions are met:

- .1 Internal combustion engines, fuel cell engines vehicles, and battery-powered equipment are stowed on the vehicle, special category and ro-ro spaces or on the weather deck of a roll-on/roll-off ship or a cargo space designated by the Administration (flag State) in accordance with SOLAS 74, chapter II-2, regulation 20 as specifically designed and approved for the carriage of vehicles and there are no signs of leakage from the battery, engine, fuel cell, compressed gas cylinder or accumulator, or fuel tank when applicable. When packed in a cargo transport unit the exception does not apply to container cargo spaces of a ro-ro ship. Vehicles powered solely by lithium batteries and hybrid electric vehicles powered by both an internal combustion engine and lithium metal or ion batteries, the battery is of a type proved to meet the requirements of the United Nations Manual of Tests and Criteria, part III, subsection 38.3, unless otherwise approved by the competent Authority;
- .2 Internal combustion engines, vehicles powered by a flammable liquid fuel with a flashpoint of 38°C or above, there are no leaks in any portion of the fuel system, the fuel tank(s) contains 450 l of fuel or less and installed batteries are protected from short-circuit.
- .3 Internal combustion engines with a fuel tank attached and vehicles powered by a flammable liquid fuel with a flashpoint less than 38°C, the fuel tank(s) are empty and installed batteries are protected from short circuit. The internal combustion engines or vehicle are considered to be empty of flammable liquid fuel when the fuel tank has been drained and the vehicle cannot be operated due to a lack of fuel. Engine components such as fuel lines, fuel filters and injectors do not need to be cleaned, drained or purged to be considered empty. The fuel tank does not need to be cleaned or purged;
- .4 Internal combustion engines with an attached fuel tank and vehicles powered by a flammable gas (liquefied or compressed), the fuel tank(s) are empty and the positive pressure in the tank does not exceed 2 bar, the fuel shut-off or isolation valve is closed and secured, and installed batteries are protected from short circuit;

- .5 Vehicles or battery powered equipment solely powered by a wet or dry electric storage battery or a sodium battery, and the battery is protected from short circuit;
- .6 Internal combustion engines powered by a flammable liquid or flammable gas have been cleaned, drained and purged of all flammable liquids and gases or the engine has been sealed to prevent leakage of any residues; or
- .7 Fuel cell engines are protected from inadvertent operation by closing fuel supply lines or by other means and the fuel supply reservoir has been drained and sealed. The fuel supply reservoir does not need to be cleaned or purged.

Notwithstanding above, dangerous goods required for the operation of the internal combustion engines or the vehicle or for the safety of the operator such as fire extinguishers, compressed gas cylinders, accumulators, airbag inflators, starter batteries, etc., shall be securely mounted. All other dangerous goods in the vehicle shall be separately packaged and consigned for transport, as appropriate, in accordance with this Code.

For fuel cell engines, all dangerous goods other than fuel and fuel cells shall be separately packaged and consigned for transport, as appropriate, in accordance with this Code."

SP 962 Replace 962 with the following:

"SP 962 internal combustion engines, vehicles, fuel cell engines, or battery powered equipment not meeting the conditions of special provision 961 shall be assigned to class 9 and shall meet the following requirements:

- .1 internal combustion engines, vehicles, combustion engines, fuel cell engines or battery powered equipment shall not show signs of leakage from batteries, engines, fuel cells, compressed gas cylinders or accumulators, or fuel tank(s) when applicable;
- .2 for flammable liquid powered vehicles and internal combustion engines the fuel tank(s) containing the flammable liquid shall not be more than one fourth full and in any case the flammable liquid shall not exceed 250 l unless otherwise approved by the competent authority;
- .3 for flammable gas powered vehicles and internal combustion engines, the fuel shut-off valve of the fuel tank(s) shall be securely closed;
- .4 installed batteries shall be protected from damage, short circuit, and accidental activation during transport. Lithium ion or lithium metal batteries shall be of a type proved to meet the requirements of the United Nations Manual of Tests and Criteria, part III, subsection 38.3, unless otherwise approved by the competent authority; and

Notwithstanding above dangerous goods required for the operation of the internal combustion engines or the vehicle or for the safety of the operator

such as fire extinguishers, compressed gas accumulators, airbag inflators, starter batteries, etc., shall be securely mounted.

The provisions of this Code relevant to marking, labelling, placarding and marine pollutants shall not apply."

SP 963 Replace the words "column 16" with "columns 16a and 16b"

Insert the following new special provisions:

"367 For the purposes of documentation and package marking:

The proper shipping name "Paint related material" may be used for consignments of packages containing "Paint" and "Paint related material" in the same package;

The proper shipping name "Paint related material, corrosive, flammable" may be used for consignments of packages containing "Paint, corrosive, flammable" and "Paint related material, corrosive, flammable" in the same package;

The proper shipping name "Paint related material, flammable, corrosive" may be used for consignments of packages containing "Paint, flammable, corrosive" and "Paint related material, flammable, corrosive" in the same package; and

The proper shipping name "Printing ink related material" may be used for consignments of packages containing "Printing Ink" and "Printing ink related material" in the same package."

"368 In the case of non-fissile or fissile-excepted uranium hexafluoride, the material shall be classified under UN 3507 or UN 2978."

"369 In accordance with 2.0.3.5, this radioactive material in an excepted package possessing corrosive properties is classified in Class 8 with a radioactive material subsidiary risk.

Uranium hexafluoride may be classified under this entry only if the conditions of 2.7.2.4.1.2, 2.7.2.4.1.5, 2.7.2.4.5.2 and, for fissile-excepted material, of 2.7.2.3.6 are met.

In addition to the provisions applicable to the transport of Class 8 substances, the provisions of 5.1.3.2, 5.1.5.2.2, 5.1.5.4.1.2, 7.1.4.5.9, 7.1.4.5.10, 7.1.4.5.12, and 7.8.4.1 to 7.8.4.6 shall apply.

No Class 7 label is required to be displayed."

"370 This entry applies to:

- ammonium nitrate with more than 0.2% combustible substances, including any organic substance calculated as carbon, to the exclusion of any added substance; and
- ammonium nitrate with not more than 0.2% combustible substances, including any organic substance calculated as carbon, to the exclusion of any added substance, that is not too sensitive for acceptance into

Class 1 when tested in accordance with Test Series 2 (see Manual of Tests and Criteria, Part I). See also UN No. 1942."

- "371 .1 This entry also applies to articles, containing a small pressure receptacle with a release device. Such articles shall comply with the following requirements:
- (a) The water capacity of the pressure receptacle shall not exceed 0.5 litres and the working pressure shall not exceed 25 bar at 15°C;
  - (b) The minimum burst pressure of the pressure receptacle shall be at least four times the pressure of the gas at 15°C;
  - (c) Each article shall be manufactured in such a way that unintentional firing or release is avoided under normal conditions of handling, packing, transport and use. This may be fulfilled by an additional locking device linked to the activator;
  - (d) Each article shall be manufactured in such a way as to prevent hazardous projections of the pressure receptacle or parts of the pressure receptacle;
  - (e) Each pressure receptacle shall be manufactured from material which will not fragment upon rupture;
  - (f) The design type of the article shall be subjected to a fire test. For this test, the provisions of paragraphs 16.6.1.2 except letter g, 16.6.1.3.1 to 16.6.1.3.6, 16.6.1.3.7 (b) and 16.6.1.3.8 of the Manual of Tests and Criteria shall be applied. It shall be demonstrated that the article relieves its pressure by means of a fire degradable seal or other pressure relief device, in such a way that the pressure receptacle will not fragment and that the article or fragments of the article do not rocket more than 10 m;
  - (g) The design type of the article shall be subjected to the following test. A stimulating mechanism shall be used to initiate one article in the middle of the packaging. There shall be no hazardous effects outside the package such as disruption of the package, metal fragments or a receptacle which passes through the packaging.
- .2 The manufacturer shall produce technical documentation of the design type, manufacture as well as the tests and their results. The manufacturer shall apply procedures to ensure that articles produced in series are made of good quality, conform to the design type and are able to meet the requirements in .1. The manufacturer shall provide such information to the Competent Authority on request."

"372 This entry applies to asymmetric capacitors with an energy storage capacity greater than 0.3 Wh. Capacitors with an energy storage capacity of 0.3 Wh or less are not subject to the provisions of this Code.

Energy storage capacity means the energy stored in a capacitor, as calculated according to the following equation,

$$Wh = 1/2C_N(U_R^2 - U_L^2) \times (1/3600),$$

using the nominal capacitance ( $C_N$ ), rated voltage ( $U_R$ ) and rated lower limit voltage ( $U_L$ ).

All asymmetric capacitors to which this entry applies shall meet the following conditions:

- (a) Capacitors or modules shall be protected against short circuit;
- (b) Capacitors shall be designed and constructed to safely relieve pressure that may build up in use, through a vent or a weak point in the capacitor casing. Any liquid which is released upon venting shall be contained by packaging or by equipment in which a capacitor is installed;
- (c) Capacitors shall be marked with the energy storage capacity in Wh, except those manufactured before 1 January 2016;
- (d) Capacitors containing an electrolyte meeting the classification criteria of any class or division of dangerous goods shall be designed to withstand a 95 kPa pressure differential;

Capacitors containing an electrolyte not meeting the classification criteria of any class or division of dangerous goods, including when configured in a module or when installed in equipment are not subject to other provisions of this Code. Capacitors containing an electrolyte meeting the classification criteria of any class or division of dangerous goods, with an energy storage capacity of 20 Wh or less, including when configured in a module, are not subject to other provisions of this Code when the capacitors are capable of withstanding a 1.2 metre drop test unpackaged on an unyielding surface without loss of contents.

Capacitors containing an electrolyte meeting the classification criteria of any class or division of dangerous goods that are not installed in equipment and with an energy storage capacity of more than 20 Wh are subject to this Code.

Capacitors installed in equipment and containing an electrolyte meeting the classification criteria of any class or division of dangerous goods, are not subject to other provisions of these Regulations provided that the equipment is packaged in a strong outer packaging constructed of suitable material, and of adequate strength and design, in relation to the packaging's intended use and in such a manner as to prevent accidental functioning of capacitors during transport. Large robust equipment containing capacitors may be offered for transport unpackaged or on pallets when capacitors are afforded equivalent protection by the equipment in which they are contained.

Note: Notwithstanding the provisions of this special provision, nickel-carbon asymmetric capacitors containing Class 8 alkaline electrolytes shall be transported as UN 2795, BATTERIES, WET, FILLED WITH ALKALI, electric storage."

"373 Neutron radiation detectors containing non-pressurized boron trifluoride gas may be transported under this entry provided that the following conditions are met:

- .1 Each radiation detector shall meet the following conditions.
- (i) The pressure in each detector shall not exceed 105 kPa absolute at 20°C;
  - (ii) The amount of gas shall not exceed 13 g per detector;
  - (iii) Each detector shall be manufactured under a registered quality assurance programme;

**NOTE:** The application of ISO 9001:2008 may be considered acceptable for this purpose.

- (iv) Each neutron radiation detector shall be of welded metal construction with brazed metal to ceramic feed through assemblies. These detectors shall have a minimum burst pressure of 1800 kPa as demonstrated by design type qualification testing; and
  - (v) Each detector shall be tested to a  $1 \times 10^{-10}$  cm<sup>3</sup>/s leaktightness standard before filling.
- .2 Radiation detectors transported as individual components shall be transported as follows:
- (i) Detectors shall be packed in a sealed intermediate plastics liner with sufficient absorbent material to absorb the entire gas contents;
  - (ii) They shall be packed in strong outer packaging. The completed package shall be capable of withstanding a 1.8 m drop test without leakage of gas contents from detectors;
  - (iii) The total amount of gas from all detectors per outer packaging shall not exceed 52 g.

- .3 Completed neutron radiation detection systems containing detectors meeting the conditions of paragraph (a) shall be transported as follows:
- (i) The detectors shall be contained in a strong sealed outer casing;
  - (ii) The casing shall contain sufficient absorbent material to absorb the entire gas contents;
  - (iii) The completed systems shall be packed in strong outer packagings capable of withstanding a 1.8 m drop test without leakage unless a system's outer casing affords equivalent protection.

Packing instruction P200 of 4.1.4.1 is not applicable.

The transport document shall include the following statement "Transport in accordance with special provision 373".

Neutron radiation detectors containing not more than 1 g of boron trifluoride, including those with solder glass joints, are not subject to this Code provided they

meet the requirements in paragraph .1 and are packed in accordance with paragraph .2. Radiation detection systems containing such detectors are not subject to this Code provided they are packed in accordance with paragraph .3.

Nuclear radiation detectors shall be stowed in accordance with stowage Category A."

"SP 376 Lithium ion cells or batteries and lithium metal cells or batteries identified as being damaged or defective such that they do not conform to the type tested according to the applicable provisions of the Manual of Tests and Criteria shall comply with the requirements of this special provision.

For the purposes of this special provision, these may include, but are not limited to:

- Cells or batteries identified as being defective for safety reasons;
- Cells or batteries that have leaked or vented;
- Cells or batteries that cannot be diagnosed prior to transport; or
- Cells or batteries that have sustained physical or mechanical damage.

**NOTE:** In assessing a battery as damaged or defective, the type of battery and its previous use and misuse shall be taken into account.

Cells and batteries shall be transported according to the provisions applicable to UN 3090, UN 3091, UN 3480 and UN 3481, except special provision 230 and as otherwise stated in this special provision.

Packages shall be marked "DAMAGED/DEFECTIVE LITHIUM-ION BATTERIES" or "DAMAGED/DEFECTIVE LITHIUM METAL BATTERIES", as applicable.

Cells and batteries shall be packed in accordance with packing instructions P908 of 4.1.4.1 or LP904 of 4.1.4.3, as applicable.

Cells and batteries liable to rapidly disassemble, dangerously react, produce a flame or a dangerous evolution of heat or a dangerous emission of toxic, corrosive or flammable gases or vapours under normal conditions of transport shall not be transported except under conditions specified by the competent authority."

"SP 377 Lithium ion and lithium metal cells and batteries and equipment containing such cells and batteries transported for disposal or recycling, either packed together with or packed without non-lithium batteries, may be packaged in accordance with packing instruction P909 of 4.1.4.1.

These cells and batteries are not subject to the requirements of section 2.9.4.

Packages shall be marked "LITHIUM BATTERIES FOR DISPOSAL" or "LITHIUM BATTERIES FOR RECYCLING".

Identified damaged or defective batteries shall be transported in accordance with special provision 376 and packaged in accordance with P908 of 4.1.4.1 or LP904 of 4.1.4.3, as applicable."



"SP 968 This entry shall not be used for sea transport. Discarded packaging shall meet the requirements of 4.1.1.11."

"SP 969 Substances classified in accordance to 2.9.3 are subject to the provisions for marine pollutants. Substances which are transported under UN 3077 and 3082 but which do not meet the criteria of 2.9.3 (see 2.9.2.2) are not subject to the provisions for marine pollutants. However for substances that are identified as marine pollutants in this Code (see Index) but which no longer meet the criteria of 2.9.3, the provisions of 2.10.2.6 apply."

"SP 970 This entry only applies to internal combustion engines (including machinery or equipment powered by such engines) to fuel cell engines, and to vehicles powered by flammable liquid, flammable gas and fuel cells containing flammable liquid or gas (including hybrid electric vehicles, see SP 312 or SP 240). For the purposes of this entry vehicles are defined as road vehicles (e.g. cars, motorcycles), boats, aircraft, wheeled or tracked construction or farming equipment and any other self-propelled apparatus designed to carry one or more persons or goods. For internal combustion engines where the requirement of Special Provisions 961 or 962 are not met, an appropriate name and description shall be selected and the relevant provisions of this Code shall apply. If a vehicle is powered by a flammable liquid and a flammable gas internal combustion engine, it shall be assigned to UN 3166 VEHICLE, FLAMMABLE GAS POWERED."

## **Chapter 3.4 – Dangerous goods packed in limited quantities**

### **3.4.1 General**

3.4.1.2 In subparagraph ".5" delete the reference "5.3.2.3".

### **3.4.3 Stowage**

3.4.3 In the paragraph, replace the words "column 16" with "column 16a".

### **3.4.4 Segregation**

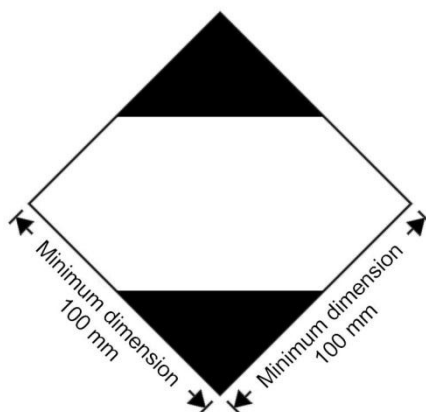
3.4.4.1 In subparagraph ".2" replace the words "column 16" with "column 16b"

### **3.4.5 Marking and placarding**

Amend section 3.4.5.1 and 3.4.5.2 to read as follows:

#### **"3.4.5 Marking and Placarding**

3.4.5.1 Except for air transport, packages containing dangerous goods in limited quantities shall bear the marking shown below:



#### Marking for packages containing limited quantities

The marking shall be readily visible, legible and able to withstand open weather exposure without a substantial reduction in effectiveness. The marking shall be in the form of a square set at an angle of 45° (diamond-shaped). The top and bottom portions and the surrounding line shall be black. The centre area shall be white or a suitable contrasting background. The minimum dimensions shall be 100 mm x 100 mm and the minimum width of the line forming the diamond shall be 2 mm. Where dimensions are not specified, all features shall be in approximate proportion to those shown. If the size of the package so requires, the minimum outer dimensions shown above may be reduced to be not less than 50 mm x 50 mm provided the marking remains clearly visible. The minimum width of the line forming the diamond may be reduced to a minimum of 1 mm.

**NOTE:** The provisions of 3.4.5.1 of the IMDG Code amendment 36-12 may continue to be applied until 31 December 2016."

3.4.5.2 Packages containing dangerous goods packed in conformity with the provisions of Part 3, Chapter 4 of the ICAO Technical Instructions for the Transport of Dangerous Goods may bear the marking shown below to certify conformity with these provisions:



Marking for packages containing limited quantities conforming to Part 3, Chapter 4 of the ICAO Technical Instructions for the Safe Transport of Dangerous Goods by Air.

The marking shall be readily visible, legible and able to withstand open weather exposure without a substantial reduction in effectiveness. The marking shall be in the form of a square set at an angle of 45° (diamond-shaped). The top and bottom portions and the surrounding line shall be black. The centre area shall be white or a suitable contrasting background. The minimum dimensions shall be 100 mm x 100 mm and the minimum width of the line forming the diamond shall be 2 mm. The symbol "Y" shall be placed in the centre of the mark and shall be clearly visible. Where dimensions are not specified, all features shall be in approximate proportion to those shown. If the size of the package so requires, the minimum outer dimensions shown above may be reduced to be not less than 50 mm x 50 mm provided the marking remains clearly visible. The minimum width of the line forming the diamond may be reduced to a minimum of 1 mm. The symbol "Y" shall remain in approximate proportion to that shown above.

**Note:** The provisions of 3.4.5.2 of IMDG Code (amendment 36-12) may continue to be applied until 31 December 2016."

3.4.5.3 Amend to read as follows:

**"3.4.5.3 Multimodal recognition of marks**

3.4.5.3.1 Packages containing dangerous goods bearing the marking shown in 3.4.5.2 with or without the additional labels and markings for air transport shall be deemed to meet the provisions of section 3.4.2 and need not bear the marking shown in 3.4.5.1.

3.4.5.3.2 Packages containing dangerous goods in limited quantities bearing the marking shown in 3.4.5.1 and conforming with the provisions of the ICAO Technical Instructions for the Safe Transport of Dangerous Goods by Air, including all necessary marks and labels specified in Parts 5 and 6, shall be deemed to meet the provisions of section 3.4.1 as appropriate and of section 3.4.2."

**3.4.5.5 Placarding and marking of cargo transport units**

3.4.5.5.3 Delete the existing paragraph and insert "reserve"

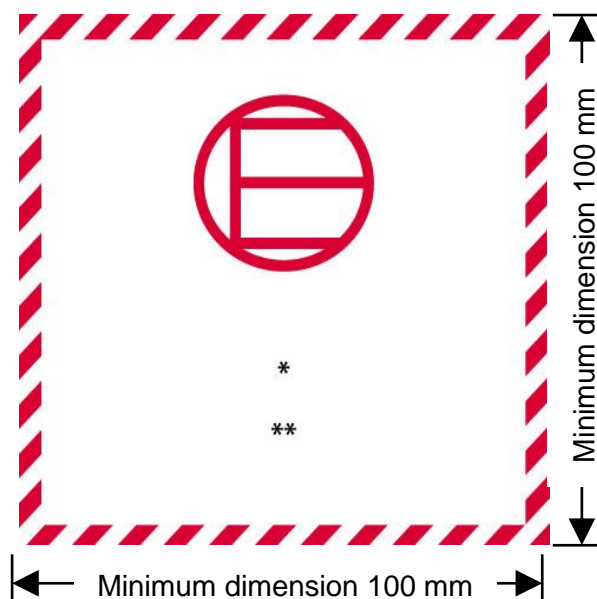
**Chapter 3.5 – Dangerous goods packed in excepted quantities**

**3.5.4 Marking of packages**

3.5.4.1 Delete the mark and the text below the mark.

3.5.4.2 and 3.5.4.3 Amend to read as follows:

### 3.5.4.2



Excepted quantities mark

- \* The Class or, when assigned, the Division number(s) shall be shown in this location.
- \*\* The name of the consignor or of the consignee shall be shown in this location if not shown elsewhere on the package.

The marking shall be in the form of a square. The hatching and symbol shall be of the same colour, black or red, on white or suitable contrasting background. The minimum dimensions shall be 100 mm x 100 mm. Where dimensions are not specified, all features shall be in approximate proportion to those shown.

3.5.4.3 An overpack containing dangerous goods in excepted quantities shall display the markings required by 3.5.4.1, unless such markings on packages within the overpack are clearly visible.

**Note:** The provisions of 3.5.4.1 and 3.5.4.2 of the IMDG Code (amendment 36-12) may continue to be applied until 31 December 2016."

### 3.5.7 Stowage

3.5.7.1 In the paragraph, replace the words "column 16" with "column 16a"

### 3.5.8 Segregation

3.5.8.1 In the paragraph, replace the words "column 16" with "column 16b"

3.5.8.2 In the paragraph, replace the words "column 16" with "column 16b"

### Appendix A – List of generic and N.O.S. Proper Shipping Names

Add the following new entries in appendix A under the appropriate class in the general entries section:

Class or Division	Subsidiary Risk	UN No	Proper Shipping Name
2.1		3510	ADSORBED GAS, FLAMMABLE, N.O.S.
2.2		3511	ADSORBED GAS, N.O.S.
2.3		3512	ADSORBED GAS, TOXIC, N.O.S.
2.2	5.1	3513	ADSORBED GAS, OXIDIZING, N.O.S.
2.3	2.1	3514	ADSORBED GAS, TOXIC, FLAMMABLE, N.O.S.
2.3	5.1	3515	ADSORBED GAS, TOXIC, OXIDIZING, N.O.S.
2.3	8	3516	ADSORBED GAS, TOXIC, CORROSIVE, N.O.S.
2.3	2.1 + 8	3517	ADSORBED GAS, TOXIC, FLAMMABLE, CORROSIVE, N.O.S.
2.3	5.1 + 8	3518	ADSORBED GAS, TOXIC, OXIDIZING, CORROSIVE, N.O.S.

### Appendix B – Glossary of terms

Amend the entry for "AIR BAG INFLATORS, PYROTECHNIC or AIR BAG MODULES, PYROTECHNIC or SEAT-BELT PRETENSIONERS, PYROTECHNIC" to read:

"SAFETY DEVICES, electrically initiated".

Amend the definition to read as follows:

"Articles which contain pyrotechnic substances or dangerous goods of other classes and are used in vehicles, vessels or aircraft to enhance safety to persons. Examples are: air bag inflators, air bag modules, seat-belt pretensioners and pyromechanical devices. These pyromechanical devices are assembled components for tasks such as but not limited to separation, locking, or release-and-drive or occupant restraint. The term includes "SAFETY DEVICES, PYROTECHNIC"."

## Alphabetical index

Amend the following entries as indicated hereunder:

Amend the entries for "AIR BAG INFLATORS, PYROTECHNIC or AIR BAG MODULES, PYROTECHNIC or SEAT-BELT PRETENSIONERS, PYROTECHNIC" to read as follows:

«Air bag inflators, see	1.4G 9	0503 3268»
«Air bag modules, see	1.4G 9	0503 3268»
«Seat-belt pretensioners, see	1.4G 9	0503 3268»

In the entries for "Actinolite", "Anthophyllite" and "Tremolite" in the UN No. column, replace "2590" with "2212".

Delete the entries for "Asbestos, blue or brown", "Asbestos, white", "Chrysotile", , "BLUE ASBESTOS (crocidolite)", "BROWN ASBESTOS (amosite, mysorite)", "WHITE ASBESTOS (chrysotile, actinolite, anthophyllite, tremolite)". (delete entries regardless names in the UN Regulations differs from those in the IMDG Code)

In the entry for "TRIFLUOROCHLOROETHYLENE, STABILIZED" UN No. 1082, add at the end "(REFRIGERANT GAS R 1113)".

In the entry for "AMMONIUM NITRATE", (UN 1942), amend the description to read as follows "AMMONIUM NITRATE with not more than 0.2% combustible substances, including any organic substance calculated as carbon, to the exclusion of any other added substance".

In the entry for "AMMONIUM NITRATE", (UN 0222), amend the description to read as follows "AMMONIUM NITRATE".

In the entry for "CAPACITOR, electric double layer..." (UN 3499), amend the description to read as follows: "CAPACITOR, ELECTRIC DOUBLE LAYER (with an energy storage capacity greater than 0.3Wh)".

Drazoxolon: Replace "see PESTICIDE, N.O.S." with "see ORGANOCHLORINE PESTICIDE".

Kelevan: Replace "see PESTICIDE, N.O.S." with "see ORGANOCHLORINE PESTICIDE".

Nabam: Replace "see THIOCARBAMATE PESTICIDE" with "see Note 1".

Oxamyl: Replace "see PESTICIDE, N.O.S." with "see CARBAMATE PESTICIDE".

In the entry for "AMMONIA, ANHYDROUS", UN (1005), insert "P" in the column for MP.

In the entries for "ALLYL ALCOHOL" and "Propenyl alcohol", UN (1098), insert "P" in the column for MP.

In the entry for "HEPTANES", UN (1206), insert "P" in the column for MP.

In the entries for "Hexane" and "2-Methylpentane", UN (1208), insert "P" in the column for MP.

In the entries for "Isooctane", "2-Methylheptane", "OCTANES" and "2,2,4-Trimethylpentane", UN (1262), insert "P" in the column for MP.

In the entry for "PINE OIL", UN (1272), insert "P" in the column for MP.

In the entry for "TURPENTINE", UN (1299), insert "P" in the column for MP.

In the entries for "Creosote salts", "NAPHTHALENE, CRUDE" and "NAPHTHALENE, REFINED", UN (1334), insert "P" in the column for MP.

In the entries for "Aminobenzene", "ANILINE", "Aniline oil" and "Phenylamine", UN (1547), insert "P" in the column for MP.

In the entries for "Methyldinitrobenzenes, molten" and "DINITROTOLUENES, MOLTEN", UN (1600), insert "P" in the column for MP.

In the entry for "TOLUIDINES, LIQUID", UN (1708), insert "P" in the column for MP.

In the entries for "CALCIUM HYPOCHLORITE, DRY with more than 39% available chlorine (8.8% available oxygen)" and "CALCIUM HYPOCHLORITE MIXTURE, DRY with more than 39% available chlorine (8.8% available oxygen)", UN (1748), insert "P" in the column for MP.

In the entry for "Sodium hypochlorite solution", UN (1791), insert "P" in the column for MP.

In the entry for "ZINC CHLORIDE SOLUTION", UN (1840), insert "P" in the column for MP.

In the entry for "NONANES", UN (1920), insert "P" in the column for MP.

Insert a new entry "2,4-Dichlorophenol,see," in the column for Substance, material or article, "P" in the column for MP, "6.1" in the column for Class, "2020" in the column for UN No..

In the entry for "DINITROTOLUENES, LIQUID" and "Methyldinitrobenzenes, liquid", UN (2038), insert "P" in the column for MP.

Insert a new entry "1,3-Dichloropropene, see" in the column for Substance, material or article, "P" in the column for MP, "3" in the column for Class, "2047" in the column for UN No..

In the entry for "AMMONIA SOLUTION relative density less than 0.880 at 15°C in water, with more than 35% but not more than 50% ammonia", UN (2073), insert "P" in the column for MP.

In the entries for "Bleaching powder" and "CALCIUM HYPOCHLORITE MIXTURE, DRY with more than 10% but not more than 39% available chlorine", UN (2208), insert "P" in the column for MP.

In the entries for "Propenoic acid, stabilized", "Acroleic acid, stabilized" and "ACRYLIC ACID, STABILIZED", UN (2218), insert "P" in the column for MP.



In the entries for "meta-Chlorotoluene" and "para-Chlorotoluene", delete "P", and in the entry for "ortho-Chlorotoluene", UN (2238) insert "P" in the column for MP.

In the entry for "CYCLOHEPTANE", UN (2241), insert "P" in the column for MP.

In the entry for "NAPHTHALENE, MOLTEN", UN (2304), insert "P" in the column for MP.

In the entries for "1,3,5-TRIMETHYLBENZENE" and "Mesitylene", UN (2325), insert "P" in the column for MP.

In the entry for "ZINC CHLORIDE, ANHYDROUS", UN (2331), insert "P" in the column for MP.

In the entry for "alpha-PINENE", UN (2368), insert "P" in the column for MP.

In the entries for "DIMETHYL DISULPHIDE", "Methyl disulphide" and "Methyldithiomethane", UN (2381), insert "P" in the column for MP.

In the entry for "AMMONIA SOLUTION relative density between 0.880 and 0.957 at 15°C in water, with more than 10% but not more than 35% ammonia, by mass", UN (2672), insert "P" in the column for MP.

In the entries for "BUTYLBENZENES", "Isobutylbenzene", "2-Methyl-2-phenylpropane", "1-Phenylbutane" and "2-Phenylbutane", UN (2709), insert "P" in the column for MP.

In the entries for "Dodecene", "PROPYLENE TETRAMER" and "Tetrapropylene", UN (2850), insert "P" in the column for MP.

In the entries for "CALCIUM HYPOCHLORITE, HYDRATED with not less than 5.5% but not more than 16% water" and "CALCIUM HYPOCHLORITE, HYDRATED MIXTURE with not less than 5.5% but not more than 16% water", UN (2880), insert "P" in the column for MP.

In the entry for "AMMONIA SOLUTION relative density less than 0.880 at 15° C in water, with more than 50% ammonia", UN (3318), insert "P" in the column for MP.

In the entry for "TOLUIDINES, SOLID", UN (3451), insert "P" in the column for MP.

In the entries for "DINITROTOLUENES, SOLID" and "Methyldinitrobenzenes, solid", UN (3454), insert "P" in the column for MP.

In the entry for "CALCIUM HYPOCHLORITE MIXTURE, DRY, CORROSIVE with more than 39% available chlorine (8.8% available oxygen)", UN (3485), insert "P" in the column for MP.

In the entry for "CALCIUM HYPOCHLORITE MIXTURE, DRY, CORROSIVE with more than 10% but not more than 39% available chlorine", UN (3486), insert "P" in the column for MP.

In the entries for "CALCIUM HYPOCHLORITE, HYDRATED MIXTURE, CORROSIVE with not less than 5.5% but not more than 16% water" and "CALCIUM HYPOCHLORITE, HYDRATED, CORROSIVE with not less than 5.5% but not more than 16% water", UN (3487), insert "P" in the column for MP.

Add the following new entries in alphabetical order:

<i>Name and description</i>	<i>Class</i>	<i>UN No.</i>
ADSORBED GAS, FLAMMABLE, N.O.S.	2.1	3510
ADSORBED GAS, N.O.S.	2.2	3511
ADSORBED GAS, OXIDIZING, N.O.S.	2.2	3513
ADSORBED GAS, TOXIC, CORROSIVE, N.O.S.	2.3	3516
ADSORBED GAS, TOXIC, FLAMMABLE, CORROSIVE, N.O.S.	2.3	3517
ADSORBED GAS, TOXIC, FLAMMABLE, N.O.S.	2.3	3514
ADSORBED GAS, TOXIC, N.O.S.	2.3	3512
ADSORBED GAS, TOXIC, OXIDIZING, CORROSIVE, N.O.S.	2.3	3518
ADSORBED GAS, TOXIC, OXIDIZING, N.O.S.	2.3	3515
Amphibole asbestos, see	9	2212
ARSINE, ADSORBED	2.3	3522
ASBESTOS, AMPHIBOLE	9	2212
ASBESTOS, CHRYBOTILE	9	2590
BORON TRIFLUORIDE, ADSORBED	2.3	3519
CAPACITOR, ASYMMETRIC, (with an energy storage capacity greater than 0.3Wh)	9	3508
CHLORINE, ADSORBED	2.3	3520
Chrysotile, see	9	2590
GERMANE, ADSORBED	2.3	3523
HYDROGEN SELENIDE, ADSORBED	2.3	3526

<i>Name and description</i>	<i>Class</i>	<i>UN No.</i>
Mercurous chloride, see	6.1	2025
PACKAGING DISCARDED, EMPTY, UNCLEANED	9	3509
PHOSPHINE, ADSORBED	2.3	3525
PHOSPHORUS PENTAFLUORIDE, ADSORBED	2.3	3524
SAFETY DEVICES, electrically initiated	9	3268
SAFETY DEVICES, PYROTECHNIC	1.4G	0503
SILICON TETRAFLUORIDE, ADSORBED	2.3	3521
URANIUM HEXAFLUORIDE, RADIOACTIVE MATERIAL, EXCEPTED PACKAGE, less than 0.1 kg per package, non- fissile or fissile-excepted	8	3507
Talcum with tremolite and/or actinolite, see	9	2212

## PART 4 PACKING AND TANK PROVISIONS

### Chapter 4.1 – Use of packagings, including intermediate bulk containers (IBCs) and large packagings

#### 4.1.1 General provisions for the packing of dangerous goods in packagings, including IBCs and large packagings

4.1.1.3 In paragraph 4.1.1.3, in the third line, the reference "6.3.2" is replaced with "6.3.5".

4.1.1.5.2 Insert a new 4.1.1.5.2 to read as follows:

"4.1.1.5.2 Use of supplementary packagings within an outer packaging (e.g. an intermediate packaging or a receptacle inside a required inner packaging) additional to what is required by the packing instructions is authorized provided all relevant requirements are met, including those of 4.1.1.3, and, if appropriate, suitable cushioning is used to prevent movement within the packaging."

and the remaining paragraphs are renumbered accordingly.

#### 4.1.4 List of packing instructions

##### 4.1.4.1 Packing instructions concerning the use of packagings (except IBCs and large packagings)

P001 Insert a new last sentence in subparagraph (a) of PP1 as follows

"On roll-on/roll-off ships the unit loads may be carried in vehicles other than closed vehicles provided they are securely fenced to the full height of the cargo carried;"

P003 Add a new special packing provision PP91 to read as follows:

"PP91 For UN 1044, large fire extinguishers may also be transported unpackaged provided that the requirements of 4.1.3.8.1.1 to 4.1.3.8.1.5 are met, the valves are protected by one of the methods in accordance with 4.1.6.1.8.1 to 4.1.6.1.8.4 and other equipment mounted on the fire extinguisher is protected to prevent accidental activation. For the purpose of this special packing provision, "large fire extinguishers" means fire extinguishers as described in subparagraphs .3 to .5 of special provision 225 of Chapter 3.3."

P114(a) Under Outer Packagings, Drums: Before "fibre (1G)" insert "plywood (1D)".

P116 In the column for "outer packagings", amend the first entry for "bags" to read: "woven plastics (5H1, 5H2, 5H3)". Amend special packing provision PP65 to read: "*Deleted*".

P131 and P137 In the entry for "boxes", in the column for "outer packagings" add: "plastics, solid (4H2)".

P404 (1) Amend to read as follows:

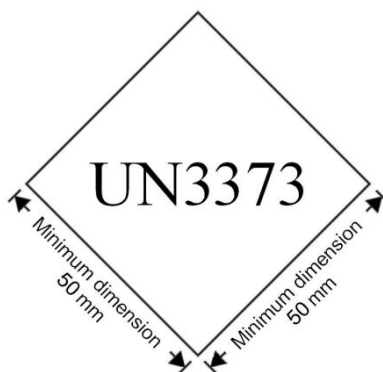
(1) **Combination packagings**  
**Outer packagings:** (1A1, 1A2, 1B1, 1B2, 1N1, 1N2, 1H1, 1H2, 1D, 1G, 4A, 4B, 4N, 4C1, 4C2, 4D, 4F, 4G or 4H2)  
**Inner packagings:** Metal receptacles with a maximum net mass of 15 kg each.  
Inner packagings shall be hermetically sealed and have threaded closures;  
Glass receptacles, with a maximum net mass of 1 kg each, having threaded closures with gaskets, cushioned on all sides and contained in hermetically sealed metal cans.  
Outer packagings shall have a maximum net mass of 125 kg.

P501, P502 and P504 Amend the last entry under "Composite packaging" to read as follows:

"Glass receptacle in steel, aluminium, fibre or plywood drum (6PA1, 6PB1, 6PD1 or 6PG1) or in a steel, aluminium, wood or fibreboard box or in wickerwork hamper (6PA2, 6PB2, 6PC, 6PG2 or 6PD2) or in solid or expanded plastics packaging (6PH1 or 6PH2)."

P601 (2) and P602 (2) At the beginning, insert "or plastics" after "consisting of metal".

P650 Amend the diagram in paragraph (4) to read as follows:



P802 (3) Amend to read as follows:

"(3) Composite packagings: Glass receptacle in steel, aluminium or plywood drum (6PA1, 6PB1 or 6PD1) or in a steel, aluminium or wood box or in wickerwork hamper (6PA2, 6PB2, 6PC or 6PD2) or in solid plastics packaging (6PH2); maximum capacity: 60 litres."

P901 After "(see 3.3.1, special provision 251)", insert the following new sentence: "Where the kit contains only dangerous goods to which no packing group is assigned, packagings shall meet Packing Group II performance level."

P903 In paragraph (2), replace subparagraphs (a) and (b) with the following subparagraphs (a) to (c):

- "(a) Strong outer packagings;
- (b) Protective enclosures (e.g. fully enclosed or wooden slatted crates); or
- (c) Pallets or other handling devices."

P904 Amend the diagram to read as follows:



P906 (2) Amend to read as follows:

"(2) For transformers and condensers and other devices:

- (a) Packagings in accordance with packing instructions P001 or P002. The articles shall be secured with suitable cushioning material to prevent inadvertent movement during normal conditions of transport; or
- (b) Leakproof packagings which are capable of containing, in addition to the devices, at least 1.25 times the volume of the liquid PCBs, polyhalogenated biphenyls or terphenyls present in them. There shall be sufficient absorbent material in the packagings to absorb at least 1.1 times the volume of liquid which is contained in the devices. In general, transformers and condensers shall be carried in leakproof metal packagings which are capable of holding, in addition to the transformers and condensers, at least 1.25 times the volume of the liquid present in them."

Insert the following new packing instructions:

P208	PACKING INSTRUCTION	P208
This instruction applies to Class 2 adsorbed gases.		
(1)	<p>The following packagings are authorized provided the general packing requirements of 4.1.6.1 are met:</p> <p>Cylinders specified in Chapter 6.2 and in accordance with ISO 11513:2011 or ISO 9809-1:2010.</p>	
(2)	<p>The pressure of each filled cylinder shall be less than 101.3 kPa at 20°C and less than 300 kPa at 50°C.</p>	
(3)	<p>The minimum test pressure of the cylinder shall be 21 bar.</p>	
(4)	<p>The minimum burst pressure of the cylinder shall be 94.5 bar.</p>	
(5)	<p>The internal pressure at 65°C of the filled cylinder shall not exceed the test pressure of the cylinder.</p>	
(6)	<p>The adsorbent material shall be compatible with the cylinder and shall not form harmful or dangerous compounds with the gas to be adsorbed. The gas in combination with the adsorbent material shall not affect or weaken the cylinder or cause a dangerous reaction (e.g. a catalyzing reaction).</p>	
(7)	<p>The quality of the adsorbent material shall be verified at the time of each fill to assure the pressure and chemical stability requirements of this packing instruction are met each time an adsorbed gas package is offered for transport.</p>	
(8)	<p>The adsorbent material shall not meet the criteria of any of the Classes or Divisions in this Code.</p>	
(9)	<p>Requirements for cylinders and closures containing toxic gases with an LC<sub>50</sub> less than or equal to 200 ml/m<sup>3</sup> (ppm) (see table 1) shall be as follows:</p>	
	<p>(a) Valve outlets shall be fitted with pressure retaining gas-tight plugs or caps having threads matching those of the valve outlets.</p>	
	<p>(b) Each valve shall either be of the packless type with non-perforated diaphragm, or be of a type which prevents leakage through or past the packing.</p>	
	<p>(c) Each cylinder and closure shall be tested for leakage after filling.</p>	
	<p>(d) Each valve shall be capable of withstanding the test pressure of the cylinder and be directly connected to the cylinder by either a taper-thread or other means which meets the requirements of ISO 10692-2:2001.</p>	
	<p>(e) Cylinders and valves shall not be fitted with a pressure relief device.</p>	
(10)	<p>Valve outlets for cylinders containing pyrophoric gases shall be fitted with gas-tight plugs or caps having threads matching those of the valve outlets.</p>	
(11)	<p>The filling procedure shall be in accordance with Annex A of ISO 11513:2011.</p>	
(12)	<p>The maximum period for periodic inspections shall be 5 years.</p>	
(13)	<p>Special packing provisions that are specific to a substance (see table 1).</p>	
	<p><i>Material compatibility</i></p>	
	<p>a: Aluminum alloy cylinders shall not be used.</p>	
	<p>d: When steel cylinders are used, only those bearing the "H" mark in accordance with 6.2.2.7.4 (p) are permitted.</p>	
	<p><i>Gas specific provisions</i></p>	
	<p>r: The filling ratio of this gas shall be limited such that, if complete decomposition occurs, the pressure does not exceed two thirds of the test pressure of the cylinder.</p>	
	<p><i>Material Compatibility for N.O.S Adsorbed Gas Entries</i></p>	
	<p>z: The construction materials of the cylinders and their accessories shall be compatible with the contents and shall not react to form harmful or dangerous compounds therewith.</p>	



P208		PACKING INSTRUCTION				P208
Table 1: ADSORBED GASES						
UN No.	Name and description	Class or Division	Subsidiary risk	LC <sub>50</sub> <sup>3</sup> ml/m <sup>3</sup>	Special packing provisions	
(1)	(2)	(3)	(4)	(5)	(6)	
3510	ADSORBED GAS, FLAMMABLE, N.O.S.	2.1			z	
3511	ADSORBED GAS, N.O.S.	2.2			z	
3512	ADSORBED GAS, TOXIC, N.O.S.	2.3		≤ 5000	z	
3513	ADSORBED GAS, OXIDIZING, N.O.S.	2.2	5.1		z	
3514	ADSORBED GAS, TOXIC, FLAMMABLE, N.O.S.	2.3	2.1	≤ 5000	z	
3515	ADSORBED GAS, TOXIC, OXIDIZING, N.O.S.	2.3	5.1	≤ 5000	z	
3516	ADSORBED GAS, TOXIC, CORROSIVE, N.O.S.	2.3	8	≤ 5000	z	
3517	ADSORBED GAS, TOXIC, FLAMMABLE, CORROSIVE, N.O.S.	2.3	2.1 8	≤ 5000	z	
3518	ADSORBED GAS, TOXIC, OXIDIZING, CORROSIVE, N.O.S.	2.3	5.1 8	≤ 5000	z	
3519	BORON TRIFLUORIDE, ADSORBED	2.3	8	387	a	
3520	CHLORINE, ADSORBED	2.3	5.1 8	293	a	
3521	SILICON TETRAFLUORIDE, ADSORBED	2.3	8	450	a	
3522	ARSINE, ADSORBED	2.3	2.1	20	d	
3523	GERMANE, ADSORBED	2.3	2.1	620	d, r	
3524	PHOSPHORUS PENTAFLUORIDE, ADSORBED	2.3	8	190		
3525	PHOSPHINE, ADSORBED	2.3	2.1	20	d	
3526	HYDROGEN SELENIDE, ADSORBED	2.3	2.1	2		

P505	PACKING INSTRUCTION		P505
This instruction applies to UN No. 3375			
The following packagings are authorized, provided that the general provisions of 4.1.1 and 4.1.3 are met:			
<b>Combination packagings:</b>	<b>Inner packaging maximum capacity</b>	<b>Outer packaging maximum net mass</b>	
Boxes (4B, 4C1, 4C2, 4D, 4G, 4H2) or drums (1B2, 1G, 1N2, 1H2, 1D) jerricans (3B2, 3H2) with glass, plastics or metal inner packagings	5 l	125 kg	
<b>Single packagings:</b>		<b>Maximum capacity</b>	
<b>Drums</b>			
aluminium (1B1, 1B2), plastics (1H1, 1H2)		250 l	250 l
<b>Jerricans</b>			
aluminium (3B1, 3B2), plastics (3H1, 3H2)		60 l	60 l
<b>Composite packagings</b>			
plastics receptacle with outer aluminium drum (6HB1)		250 l	
plastics receptacle with outer fibre, plastics or plywood drum (6HG1, 6HH1, 6HD1)		250 l	
plastics receptacle with outer aluminium crate or box or plastics receptacle with outer wooden, plywood, fibreboard or solid plastics box (6HB2, 6HC, 6HD2, 6HG2, 6HH2)		60 l	
glass receptacle with outer aluminium, fibre or plywood drum (6PB1, 6PG1, 6PD1) or with outer expanded plastics or solid plastics receptacles (6PH1, 6PH2) or with outer aluminium crate or box or with outer wooden or fibreboard box or with outer wickerwork hamper (6PB2, 6PC, 6PG2, 6PD2)		60 l	

P805	PACKING INSTRUCTION		P805
This instruction applies to UN 3507.			
The following packagings are authorized provided that the general provisions of 4.1.1 and 4.1.3 and the special packing provisions of 4.1.9.1.2, 4.1.9.1.4 and 4.1.9.1.7 are met:			
Packagings consisting of:			
(a) Metal or plastics primary receptacle(s); in			
(b) Leakproof rigid secondary packaging(s); in			
(c) A rigid outer packaging:			
Drums (1A2, 1B2, 1N2, 1H2, 1D, 1G);			
Boxes (4A, 4B, 4C1, 4C2, 4D, 4F, 4G, 4H1, 4H2);			
Jerricans (3A2, 3B2, 3H2).			
<b>Additional requirements:</b>			
1. Primary inner receptacles shall be packed in secondary packagings in a way that, under normal conditions of transport, they cannot break, be punctured or leak their contents into the secondary packaging. Secondary packagings shall be secured in outer packagings with suitable cushioning material to prevent movement. If multiple primary receptacles are placed in a single secondary packaging, they shall be either individually wrapped or separated so as to prevent contact between them.			

P805	PACKING INSTRUCTION	P805
2.	The contents shall comply with the provisions of 2.7.2.4.5.2;	
3.	The provisions of 6.4.4 shall be met.	
<b>Special packing provision:</b>		
In the case of fissile-excepted material, limits specified in 2.7.2.3.5 and 6.4.11.2 shall be met.		

P908	PACKING INSTRUCTION	P908
This instruction applies to UN Nos. 3090, 3091, 3480 and 3481.		
The following packagings are authorized for damaged or defective lithium ion cells and batteries and lithium metal cells and batteries including those contained in equipment, provided the general provisions of 4.1.1 and 4.1.3 are met:		
For cells and batteries and equipment containing cells and batteries:		
Drums (1A2, 1B2, 1N2, 1H2, 1D, 1G)		
Boxes (4A, 4B, 4N, 4C1, 4C2, 4D, 4F, 4G, 4H1, 4H2)		
Jerricans (3A2, 3B2, 3H2)		
Packagings shall conform to the packing group II performance level.		
1. Each cell or battery or equipment containing such cells or batteries shall be individually packed in inner packaging and placed inside of an outer packaging. The inner packaging or outer packaging shall be leak-proof to prevent the potential release of electrolyte.		
2. Each inner packaging shall be surrounded by sufficient non-combustible and non-conductive thermal insulation material to protect against a dangerous evolution of heat.		
3. Sealed packagings shall be fitted with a venting device when appropriate.		
4. Appropriate measures shall be taken to minimize the effects of vibrations and shocks, prevent movement of the cells or batteries within the package that may lead to further damage and a dangerous condition during transport. Cushioning material that is non-combustible and non-conductive may also be used to meet this requirement.		
5. Non combustibility shall be assessed according to a standard recognized in the country where the packaging is designed or manufactured.		
For leaking cells or batteries, sufficient inert absorbent material shall be added to the inner or outer packaging to absorb any release of electrolyte.		
A cell or battery with a net mass of more than 30 kg shall be limited to one cell or battery per outer packaging.		
<b>Additional requirements:</b>		
Cells or batteries shall be protected against short circuit.		

P909	PACKING INSTRUCTION	P909
<p>This instruction applies to UN Nos. 3090, 3091, 3480 and 3481 transported for disposal or recycling, either packed together with or packed without non-lithium batteries:</p>		
<p>(1) Cells and batteries shall be packed in accordance with the following:</p> <p>(a) The following packagings are authorized, provided that the general provisions of 4.1.1 and 4.1.3, are met: Drums (1A2, 1B2, 1N2, 1H2, 1D, 1G); Boxes (4A, 4B, 4N, 4C1, 4C2, 4D, 4F, 4G, 4H2); and Jerricans (3A2, 3B2, 3H2).</p> <p>(b) Packagings shall conform to the packing group II performance level.</p> <p>(c) Metal packagings shall be fitted with a non-conductive lining material (e.g. plastics) of adequate strength for the intended use.</p> <p>(2) However, lithium ion cells with a Watt-hour rating of not more than 20 Wh, lithium ion batteries with a Watt-hour rating of not more than 100 Wh, lithium metal cells with a lithium content of not more than 1 g and lithium metal batteries with an aggregate lithium content of not more than 2 g may be packed in accordance with the following:</p> <p>(a) In strong outer packaging up to 30 kg gross mass meeting the general provisions of 4.1.1, except 4.1.1.3, and 4.1.3.</p> <p>(b) Metal packagings shall be fitted with a non-conductive lining material (e.g. plastics) of adequate strength for the intended use.</p> <p>(3) For cells or batteries contained in equipment, strong outer packagings constructed of suitable material, and of adequate strength and design in relation to the packaging capacity and its intended use, may be used. Packagings need not meet the requirements of 4.1.1.3. Large equipment may be offered for transport unpackaged or on pallets when the cells or batteries are afforded equivalent protection by the equipment in which they are contained.</p> <p>(4) In addition, for cells or batteries with a gross mass of 12 kg or more employing a strong, impact resistant outer casing, strong outer packagings constructed of suitable material and of adequate strength and design in relation to the packagings capacity and its intended use, may be used. Packagings need not meet the requirements of 4.1.1.3.</p>		
<p><b>Additional requirements:</b></p> <p>1. Cells and batteries shall be designed or packed to prevent short circuits and the dangerous evolution of heat.</p> <p>2. Protection against short circuits and the dangerous evolution of heat includes, but is not limited to:</p> <ul style="list-style-type: none"> <li>-individual protection of the battery terminals,</li> <li>-inner packaging to prevent contact between cells and batteries,</li> <li>-batteries with recessed terminals designed to protect against short circuits, or</li> <li>-the use of a non-conductive and non-combustible cushioning material to fill empty space between the cells or batteries in the packaging.</li> </ul> <p>3. Cells and batteries shall be secured within the outer packaging to prevent excessive movement during transport (e.g. by using a non-combustible and non-conductive cushioning material or through the use of a tightly closed plastics bag).</p>		

#### 4.1.4.2 Packing instructions concerning the use of IBCs

In IBC02, insert the following new special provision B16:

"B16 For UN 3375, IBCs of type 31A and 31N are not allowed without competent authority approval."

In IBC04, replace "and 21N" with ", 21N, 31A, 31B and 31N".

In IBC05 (1), replace "and 21N" with ", 21N, 31A, 31B and 31N".

In IBC05 (2), replace "and 21H2" with ", 21H2, 31H1 and 31H2".

In IBC05 (3), replace "and 21HZ1" with ", 21HZ1 and 31HZ1".

In IBC06 (1), IBC07 (1) and IBC08 (1), replace "and 21N" with ", 21N, 31A, 31B and 31N".

In IBC06 (2), IBC07 (2) and IBC08 (2), replace "and 21H2" with ", 21H2, 31H1 and 31H2".

In IBC06 (3), IBC07 (3) and IBC08 (3), replace "and 21HZ2" with "21HZ2 and 31HZ1".

IBC100, in the first line of packing instruction IBC100, insert "0222" after "0082". Insert the following special packing provisions:

"B2 For UN No. 0222 in IBCs other than metal or rigid plastics IBCs, the IBCs shall be transported in closed cargo transport units."

"B3 For UN No. 0222, flexible IBCs shall be sift-proof and water resistant or shall be fitted with a sift-proof and water resistant liner."

"B17 For UN No. 0222, metal IBCs are not authorized."

#### 4.1.4.3 Special packing instructions concerning the use of large packagings

Insert the following new packing instructions:

LP903	PACKING INSTRUCTION	LP903
This instruction applies to UN Nos. 3090, 3091, 3480 and 3481		
The following large packagings are authorized for a single battery, including for a battery contained in equipment, provided that the general provisions of 4.1.1 and 4.1.3 are met:		
Rigid large packagings conforming to the packing group II performance level, made of:		
<ul style="list-style-type: none"> <li>steel (50A);</li> <li>aluminium (50B);</li> <li>metal other than steel or aluminium (50N);</li> <li>rigid plastics (50H);</li> <li>natural wood (50C);</li> <li>plywood (50D);</li> <li>reconstituted wood (50F);</li> <li>rigid fibreboard (50G).</li> </ul>		
The battery shall be packed so that the battery is protected against damage that may be caused by its movement or placement within the large packaging.		
<b>Additional requirement:</b>		
Batteries shall be protected against short circuit.		

LP904	PACKING INSTRUCTION	LP904
This instruction applies to UN Nos. 3090, 3091, 3480 and 3481		
The following large packagings are authorized for a single damaged or defective battery and for a single damaged or defective battery contained in equipment, provided the general provisions of 4.1.1 and 4.1.3 are met		
For batteries and equipment containing batteries:		
steel (50A) aluminium (50B) metal other than steel or aluminium (50N) rigid plastics (50H) plywood (50D)		
Packagings shall conform to the packing group II performance level.		
<ol style="list-style-type: none"><li>1. Each battery or equipment containing such battery shall be individually packed in an inner packaging and placed inside of an outer packaging. The inner packaging or outer packaging shall be leak-proof to prevent the potential release of electrolyte.</li><li>2. Each inner packaging shall be surrounded by sufficient non-combustible and non-conductive thermal insulation material to protect against a dangerous evolution of heat.</li><li>3. Sealed packagings shall be fitted with a venting device when appropriate.</li><li>4. Appropriate measures shall be taken to minimize the effects of vibrations and shocks, prevent movement of the battery within the package that may lead to further damage and a dangerous condition during transport. Cushioning material that is non-combustible and non-conductive may also be used to meet this requirement.</li><li>5. Non combustibility shall be assessed according to a standard recognized in the country where the packaging is designed or manufactured.</li></ol>		
For leaking batteries, sufficient inert absorbent material shall be added to the inner or outer packaging to absorb any release of electrolyte.		
<b>Additional requirements:</b>		
Batteries shall be protected against short circuit.		

#### **4.1.6 Special packing provisions for goods of class 2**

##### **4.1.6.1 General provisions**

4.1.6.1.2 Replace "ISO 11114-1:1997" with "ISO 11114-1:2012".

#### **4.1.9 Special packing provisions for class 7**

##### **4.1.9.1 General**

4.1.9 Amend the title to read "Special packing provisions for radioactive material"

4.1.9.1.3 Delete ", other than an excepted package,".

4.1.9.1.6 Amend the introductory sentence to read as follows:

"Before a packaging is first used to transport radioactive material, it shall be confirmed that it has been manufactured in conformity with the design specifications to ensure compliance with the relevant provisions of is Code and any applicable certificate of approval. The following requirements shall also be fulfilled, if applicable:".

In subparagraph .1, replace "package" with "packaging".

In subparagraph .2, amend the beginning of the sentence to read as follows:

"For each packaging intended for use as a Type B(U), Type B(M) or Type C package and for each packaging intended to contain fissile material ...".

In subparagraph.3, amend the text to read as follows:

".3 For each packaging intended to contain fissile material, it shall be ensured that the effectiveness of the criticality safety features is within the limits applicable to or specified for the design and in particular where, in order to comply with the requirements of 6.4.11.1 neutron poisons are specifically included, checks shall be performed to confirm the presence and distribution of those neutron poisons."

4.1.9.1.7 Insert a new paragraph to read as follows:

"4.1.9.1.7 Before each shipment of any package, it shall be ensured that the package contains neither:

- .1 Radionuclides different from those specified for the package design; nor
- .2 Contents in a form, or physical or chemical state different from those specified for the package design."

Current paragraphs 4.1.9.1.7 to 4.1.9.1.11 become new paragraphs 4.1.9.1.8 to 4.1.9.1.12.

4.1.9.1.8 (former 4.1.9.1.7) Amend to read as follows:

"4.1.9.1.8 Before each shipment of any package, it shall be ensured that all the requirements specified in the relevant provisions of this Code and in the applicable certificates of approval have been fulfilled. The following requirements shall also be fulfilled, if applicable:

- .1 It shall be ensured that lifting attachments which do not meet the requirements of 6.4.2.2 have been removed or otherwise rendered incapable of being used for lifting the package, in accordance with 6.4.2.3;
- .2 Each Type B(U), Type B(M) and Type C package shall be held until equilibrium conditions have been approached closely enough to demonstrate compliance with the requirements for temperature and pressure unless an exemption from these requirements has received unilateral approval;
- .3 For each Type B(U), Type B(M) and Type C package, it shall be ensured by inspection and/or appropriate tests that all closures, valves and other openings of the containment system through which the radioactive contents might escape are properly closed and, where appropriate, sealed in the manner for which the demonstrations of compliance with the requirements of 6.4.8.8 and 6.4.10.3 were made;



- .4 For packages containing fissile material the measurement specified in 6.4.11.5 (b) and the tests to demonstrate closure of each package as specified in 6.4.11.8 shall be performed."

#### **4.1.9.2 Provisions and controls for transport of LSA material and SCO**

4.1.9.2.2 Amend to read as follows:

"4.1.9.2.2 For LSA material and SCO which are or contain fissile material, which is not excepted under 2.7.2.3.5, the applicable requirements of 7.1.4.5.15 and 7.1.4.5.16 shall be met."

4.1.9.2.3 Insert a new paragraph 4.1.9.2.3 to read as follows:

"4.1.9.2.3 For LSA material and SCO which are or contain fissile material, the applicable requirements of 6.4.11.1 shall be met."

and current paragraphs 4.1.9.2.3 and 4.1.9.2.4 become new paragraphs 4.1.9.2.4 and 4.1.9.2.5 respectively. Table 4.1.9.2.4 is renumbered as 4.1.9.2.5.

4.1.9.2.4 (former 4.1.9.2.3) In .2, delete "and" at the end.

Add a new subparagraph .4 to read as follows:

".4 Unpackaged fissile material shall meet the requirements of 2.7.2.3.5.5"

4.1.9.2.5 (former 4.1.9.2.4) Replace "4.1.9.2.3" with "4.1.9.2.4" and "table 4.1.9.2.4" with "table 4.1.9.2.5".

Table 4.1.9.2.5 In note "a" under the table replace "4.1.9.2.3" with "4.1.9.2.4".

4.1.9.3 Packages containing fissile material

4.1.9.3 Amend to read as follows:

"4.1.9.3 The contents of packages containing fissile material shall be as specified for the package design either directly in the provisions of this Code or in the certificate of approval."

### **Chapter 4.2 – Use of portable tanks and multiple-element gas containers (MEGCs)**

#### **4.2.5 Portable tank instructions and special provisions**

##### **4.2.5.2.6 Portable tank instructions**

4.2.5.2.6 Amend the header to the tabulated portable tank instructions for T1 – T22 to read as follows:

"These portable tank instructions apply to liquid and solid substances of Class 1 and Classes 3 to 9. The general provisions of section 4.2.1 and the requirements of section 6.7.2 shall be met."

4.2.5.2.6 In tank instruction T23, at the end of footnote § add: ""CORROSIVE" subsidiary risk placard required (Model No 8, see 5.2.2.2.2)."

#### 4.2.5.3 Portable tank special provisions

4.2.5.3 In special provision TP32, paragraph (b), at the beginning, insert "For UN 3375 only,".

4.2.5.3 Add the following new portable tank special provision:

"TP41 The 2.5 year internal examination may be waived or substituted by other test methods or inspection procedures specified by the competent authority or its authorized body, provided that the portable tank is dedicated to the transport of the organometallic substances to which this tank special provision is assigned. However this examination is required when the conditions of 6.7.2.19.7 are met."

## PART 5 CONSIGNMENT PROCEDURES

### Chapter 5.1 – General provisions

#### 5.1.2 Use of overpacks and unit loads

5.1.2.1 Add the following new sentence and note at the end:

"The lettering of the "OVERPACK" marking shall be at least 12 mm high.

**Note:** The size requirement for the "OVERPACK" marking shall apply as from 1 January 2016."

#### 5.1.3 Empty uncleaned packagings or units

5.1.3.2 Replace "Packagings, including IBCs, and tanks" with "Freight containers, tanks, IBCs, as well as other packagings and overpacks,".

#### 5.1.5 General provisions for class 7

##### 5.1.5.1 Approval of shipments and notification

###### 5.1.5.1.1 *General*

5.1.5.1.1 In the first sentence replace "for package designs" with "of package designs".

###### 5.1.5.1.2 *Shipment approvals*

5.1.5.1.2 In subparagraph .4 replace "according to" with "in accordance with".

###### 5.1.5.1.4 *Notifications*

5.1.5.1.4 In subparagraph .3 replace "for shipment approval" with "for approval of shipment (see 6.4.23.2)".

###### 5.1.5.2 Certificates issued by competent authority

5.1.5.2.1 In .1, insert a new subparagraph .3 to read as follows:

"3 fissile material excepted under 2.7.2.3.5.6;"

and consequently, current subparagraphs .3 to .6 are renumbered as .4 to .7.

5.1.5.2.1 In subparagraph .5 (former .4) delete "all" and "replace "6.4.11.2" with "2.7.2.3.5, 6.4.11.2 or 6.4.11.3".

5.1.5.2.1 Insert new .4 and .5 to read as follows:

"4 Determination of the basic radionuclide values referred to in 2.7.2.2.1 for individual radionuclides which are not listed in table 2.7.2.2.1 (see 2.7.2.2.2 .1);

.5 Alternative activity limits for an exempt consignment of instruments or articles (see 2.7.2.2.2);.

5.1.5.2.1 Amend the second paragraph after subparagraphs .1 to .5 to read as follows:

"The certificates of approval for the package design and the shipment may be combined into a single certificate."

5.1.5.2.3 In the first sentence, amend the beginning of the sentence to read:

"For package designs where it is not required that a competent authority issue a certificate of approval, the consignor ..."

5.1.5.3 Determination of transport index (TI) and criticality safety index (CSI)

5.1.5.3.4 In the first sentence, replace "and overpacks" with ", overpacks and freight containers".

In subparagraph .1, replace (twice) "or overpack" with ", overpack or freight container".

In subparagraph.5, insert "or freight container" after "overpack".

In the table in 5.1.5.3.4, replace "and overpacks" with ", overpacks and freight containers" and in note "b" to the table insert at end "except for freight containers (see table 7.1.4.5.3)".

5.1.5.3.5 Replace "design or shipment approval" with "approval of design or shipment".

5.1.5.4 Specific provisions for excepted packages

5.1.5.4 Amend the title to read "Specific provisions for excepted packages of radioactive material of Class 7".

5.1.5.4.1 After "excepted packages", insert "of radioactive material of Class 7".

5.1.5.4.2 Amend to read as follows:

"5.1.5.4.2 The documentation requirements of Chapter 5.4 do not apply to excepted packages of radioactive material of Class 7, except that:

- .1 The UN number preceded by the letters "UN" and the name and address of the consignor and the consignee and, if relevant, the identification mark for each competent authority certificate of approval (see 5.4.1.5.7.1 7.) shall be shown on a transport document such as a bill of lading, air waybill or other similar document complying with the requirements of 5.4.1.2.1 to 5.4.1.2.4;
- .2 The requirements of 5.4.1.6.2 and, if relevant, those of 5.4.1.5.7.1.7, 5.4.1.5.7.3 and 5.4.1.5.7.4 shall apply;
- .3 The requirements of 5.4.2 and 5.4.4 shall apply."

5.1.5.4.3 Insert a new paragraph to read as follows:

"5.1.5.4.3 The requirements of 5.2.1.5.8 and 5.2.2.1.12.5 shall apply if relevant."

**5.1.5.5 Specific provisions for the consignment of fissile material**

Insert a new section 5.1.5.5 as follows:

**"5.1.5.5 Specific provisions for the consignment of fissile material**

Fissile material meeting one of the provisions of 2.7.2.3.5.1 to 2.7.2.3.5.6 shall meet the following requirements:

- .1 Only one of the provisions of 2.7.2.3.5.1 to 2.7.2.3.5.6 is allowed per consignment;
- .2 Only one approved fissile material in packages classified in accordance with 2.7.2.3.5.6 is allowed per consignment unless multiple materials are authorized in the certificate of approval;
- .3 Fissile material in packages classified in accordance with 2.7.2.3.5.3 shall be transported in a consignment with no more than 45 g of fissile nuclides;
- .4 Fissile material in packages classified in accordance with 2.7.2.3.5.4 shall be transported in a consignment with no more than 15 g of fissile nuclides;
- .5 Unpackaged or packaged fissile material classified in accordance with 2.7.2.3.5.5 shall be transported under exclusive use on a conveyance with no more than 45 g of fissile nuclides."

## Chapter 5.2 – Marking and labelling of packages including IBCs

### 5.2.1 Marking of packages including IBCs

5.2.1.1 Amend the second sentence to read as follows:

"The UN number and the letters "UN" shall be at least 12 mm high, except for packages of 30 litres capacity or less or of 30 kg maximum net mass and for cylinders of 60 litres water capacity when they shall be at least 6 mm in height and except for packages of 5 litres or 5 kg or less when they shall be of an appropriate size."

5.2.1.3 Add the following new sentence and note at the end:

"The lettering of the "SALVAGE" marking shall be at least 12 mm high.

**NOTE:** The size requirement for the "SALVAGE" marking shall apply as from 1 January 2016."

5.2.1.5 Special marking provisions for class 7

5.2.1.5 Replace "for Class 7" with "for radioactive material".

5.2.1.5.1 Insert the following sentence at the end:

"Each overpack shall be legibly and durably marked on the outside of the overpack with an identification of either the consignor or consignee, or both unless these markings of all packages within the overpack are clearly visible."

5.2.1.5.2 After "excepted packages" insert "of radioactive material of Class 7".

5.2.1.5.5 Amend the introductory sentence to read as follows:

"Each package which conforms to a design approved under one or more of paragraphs 5.1.5.2.1, 6.4.22.1 to 6.4.22.4, 6.4.23.4 to 6.4.23.7 and 6.4.24.2 shall be legibly and durably marked on the outside of the package with the following information:"

5.2.1.5.5 Amend .3 to read as follows:

".3 "Type B(U)", "Type B(M)" or "Type C", in the case of a Type B(U), Type B(M) or Type C package design"

5.2.1.5.5 Delete subparagraph 4.

5.2.1.5.7 Replace "4.1.9.2.3" with "4.1.9.2.4".

5.2.1.5.8 Replace "competent authority design or shipment approval" with "competent authority approval of design or shipment".

5.2.1.6 Special marking provisions for marine pollutants

5.2.1.6.1 Replace existing paragraph with the following:

"5.2.1.6.1 "Except as provided in 2.10.2.7, packages containing marine pollutants meeting the criteria of 2.9.3 shall be durably marked with the marine pollutant mark."

5.2.1.6.3 Amend 5.2.1.6.3 and figure to read as follows:

"5.2.1.6.3 The marine pollutant mark shall be as shown in the figure below.



Marine Pollutant Mark

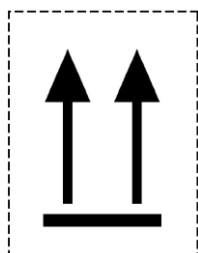
The marking shall be in the form of a square set at an angle of 45° (diamond-shaped). The symbol (fish and tree) shall be black on white or suitable contrasting background. The minimum dimensions shall be 100 mm x 100 mm and the minimum width of line forming the diamond shall be 2 mm. If the size of the package so requires, the dimensions/line thickness may be reduced, provided the marking remains clearly visible. Where dimensions are not specified, all features shall be in approximate proportion to those shown.

**NOTE 1:** The labelling provisions of 5.2.2 apply in addition to any requirement for packages to bear the marine pollutant mark.

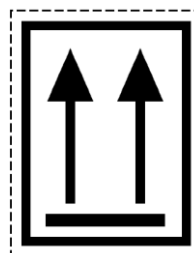
**NOTE 2:** The provisions of 5.2.1.6.3 of IMDG Code (Amendment 36-12) may continue to be applied until 31 December 2016."

5.2.1.7 Amend the figures and caption below to read as follows:

"



or



Two black or red arrows on white or suitable contrasting background.

The rectangular border is optional

All features shall be in approximate proportion to those shown."

## **5.2.2 Labelling of packages including IBCs**

### **5.2.2.1 Labelling provisions**

#### **5.2.2.1.12 Special provisions for the labelling of radioactive material**

5.2.2.1.12.1 Amend the first and second sentences to read as follows:

"Except when enlarged labels are used in accordance with 5.3.1.1.5.1, each package, overpack and freight container containing radioactive material shall bear the labels conforming to the applicable models Nos. 7A, 7B or 7C, according to the appropriate category. Labels shall be affixed to two opposite sides on the outside of the package or overpack or on the outside of all four sides of a freight container or tank."

5.2.2.1.12.1 In the fourth sentence amend "under 6.4.11.2" read "under the provisions of 2.7.2.3.5", replace "which conform to model" with "conforming to model"; replace the last phrase of the fourth sentence with the following:

"such labels, where applicable shall be affixed adjacent to the labels conforming to the applicable model Nos. 7A, 7B or 7C."

5.2.2.1.12.2 In the introductory sentence, replace "Nos. 7A, 7B and 7C" with "the applicable model No. 7A, 7B or 7C".

5.2.2.1.12.2 In .2, amend the last sentence to read as follows:

"For fissile material, the total mass of fissile nuclides in units of grams (g), or multiples thereof, may be used in place of activity".

5.2.2.1.12.3 Amend to read as follows:

"5.2.2.1.12.3 Each label conforming to the model No. 7E shall be completed with the criticality safety index (CSI) as stated in the certificate of approval applicable in the countries through or into which the consignment is transported and issued by the competent authority or as specified in 6.4.11.2 or 6.4.11.3."

5.2.2.1.12.4 Amend to read as follows:

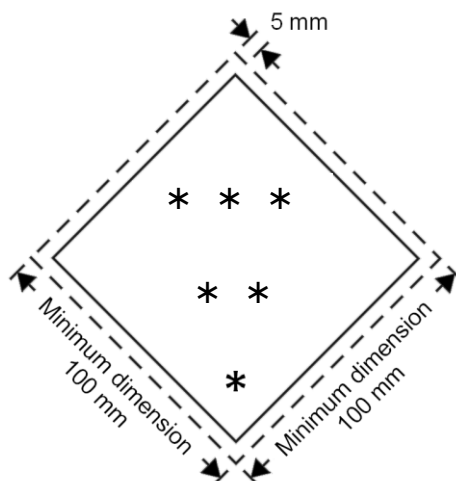
"5.2.2.1.12.4 For overpacks and freight containers, the label conforming to model No. 7E shall bear the sum of the criticality safety indexes of all the packages contained therein".

5.2.2.1.12.5 Replace "competent authority design or shipment approval" with "competent authority approval of design or shipment".

### **5.2.2.2 Provisions for labels**

5.2.2.2.1.1 Amend to read as follows:

"5.2.2.2.1.1 Labels shall be configured as shown in the figure below:



Class/division label

- \* The class or, for divisions 5.1 and 5.2, the Division number shall be shown in the bottom corner
- \*\* Additional text/numbers/letters shall (if mandatory) or may (if optional) be shown in this bottom half
- \*\*\* The class or division symbol or, for divisions 1.4, 1.5 and 1.6, the division number and for Model No 7E the word "FISSILE" shall be shown in this top half".

5.2.2.2.1.1.1 Labels shall be displayed on a background of contrasting colour, or shall have either a dotted or solid outer boundary line.

5.2.2.2.1.1.2 The label shall be in the form of a square set at an angle of 45° (diamond-shaped). The minimum dimensions shall be 100 mm x 100 mm and the minimum width of the line inside the edge forming the diamond shall be 2 mm. The line inside the edge shall be parallel and 5 mm from the outside of that line to the edge of the label. The line inside the edge on the upper half of the label shall be the same colour as the symbol and the line inside the edge on the lower half of the label shall be the same colour as the class or division number in the bottom corner. Where dimensions are not specified, all features shall be in approximate proportion to those shown.

5.2.2.2.1.1.3 If the size of the package so requires the dimensions may be reduced, provided the symbols and other elements of the label remain clearly visible. The line inside the edge shall remain 5 mm to the edge of the label. The minimum width of the line inside the edge shall remain 2 mm. Dimensions for cylinders shall comply with 5.2.2.2.1.2.

**NOTE:** The provisions of 5.2.2.2.1.1 of the IMDG Code (Amendment 36-12) may continue to be applied until 31 December 2016. When so applied, 5.2.2.2.1.1.1, 5.2.2.2.1.1.2 and 5.2.2.2.1.1.3 shall not apply until 31 December 2016."



#### **5.2.2.2.2 Specimen Labels**

5.2.2.2.2 Insert a new "note" under the heading as follows:

**Note:** Labels shall satisfy the provisions below and conform, in terms of colour, symbols and general format, to the models shown in 5.2.2.2.2. Corresponding models required for other modes of transport, with minor variations which do not affect the obvious meaning of the label, are also acceptable."

The following symbols within the IMDG Code, should be replaced by those used by the UN Recommendations:

Class 2.1, Class 2.3, No. 3, No. 4, Class 4.3, Class 5.1, Class 5.2, Class 6 and Class 8.

### **Chapter 5.3 – Placarding and marking of cargo transport units**

#### **5.3.1 Placarding**

##### **5.3.1.1 Placarding provisions**

###### **5.3.1.1.4 Placarding requirements**

5.3.1.1.4.1 Replace the existing subparagraph ".1" with the following:

".1 a freight container, semi-trailer or portable tank: one on each side and one on each end of the unit. Portable tanks having a capacity of less than 3,000 litres may be placarded or, alternatively, may be labeled instead, on only two opposite sides."

###### **5.3.1.1.5 Special provisions for class 7**

5.3.1.1.5.1 Amend the last sentence to read as follows:

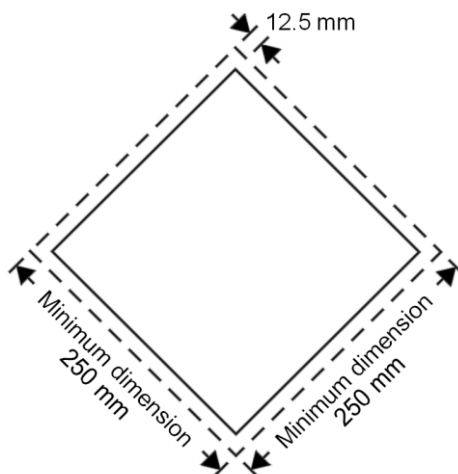
"Instead of using both labels and placards, it is permitted as an alternative to use enlarged labels only, as shown in label models Nos. 7A, 7B and 7C, except having the minimum size shown in figure 5.3.1."

5.3.1.1.5.2 In the introductory sentence replace "No." with "Nos.", "or 7E" with "and 7E" and "(Model 7D)" with "(model No.7D)".

###### **5.3.1.2 Specifications for placards**

5.3.1.2.1 Amend to read as follows:

"5.3.1.2.1 Except as provided in 5.3.1.2.2 for the Class 7 placard, and in 5.3.2.3.2 for the marine pollutant mark, a placard shall be configured as shown in the figure below.



Placard (except for class 7)

The placard shall be in the form of a square set at an angle of 45° (diamond-shaped). The minimum dimensions shall be 250 mm x 250 mm (to the edge of the placard). The line inside the edge shall be parallel and 12.5 mm from the outside of that line to the edge of the placard. The symbol and line inside the edge shall correspond in colour to the label for the class or division of the dangerous goods in question. The class or division symbol/numeral shall be positioned and sized in proportion to those prescribed in 5.2.2.2 for the corresponding class or division of the dangerous goods in question. The placard shall display the number of the class or division (and for goods in Class 1, the compatibility group letter) of the dangerous goods in question in the manner prescribed in 5.2.2.2 for the corresponding label, in digits not less than 25 mm high. Where dimensions are not specified, all features shall be in approximate proportion to those shown.

**NOTE:** The provisions of 5.3.1.2.1 from the IMDG Code (amendment 36-12) may continue to be applied until 31 December 2016."

### 5.3.2 Marking of cargo transport units

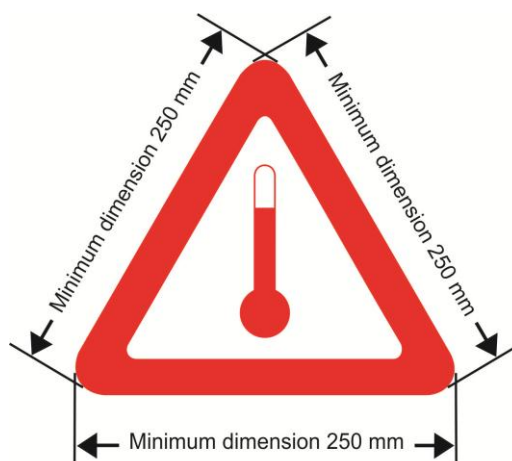
5.3.2.0.2 Insert a new second new sentence as follows:

"This may be reduced to 12 mm for portable tank containers with a capacity of less than 3,000 litres."

#### 5.3.2.2 Elevated temperature substances

5.3.2.2.1 Amend to read as follows:

"5.3.2.2.1 Cargo transport units containing a substance that is transported or offered for transport in a liquid state at a temperature equal to or exceeding 100°C, in a solid state at a temperature equal to or exceeding 240°C shall bear on each side and on each end the mark shown in the figure below.



Mark for transport at elevated temperature

The marking shall be an equilateral triangle. The colour of the mark shall be red. The minimum dimension of the sides shall be 250 mm except for portable tanks with a capacity of less than 3,000 litres where the sides may be reduced to 100 mm. Where dimensions are not specified, all features shall be in approximate proportion to those shown.

**Note:** The provisions of 5.3.2.2 of the IMDG Code (Amendment 36-12) may continue to be applied until 31 December 2016."

### 5.3.2.3 Marine pollutant mark

5.3.2.3 Replace existing paragraph under 5.3.2.3 with the following:

"5.3.2.3.1 Except as provided in 2.10.2.7, cargo transport units containing marine pollutants shall clearly display the marine pollutant mark in locations indicated in 5.3.1.1.4.1"

5.3.2.3.2 The marine pollutant mark for cargo transport units shall be as described in 5.2.1.6.3, except that the minimum dimensions shall be 250 mm x 250 mm. For portable tanks with a capacity of less than 3,000 litres, the dimensions may be reduced to 100 mm x 100 mm."

## Chapter 5.4 – Documentation

### 5.4.1 Dangerous goods transport information

#### 5.4.1.4.3 Information which supplements the Proper Shipping Name in the dangerous goods description

5.4.1.4.3 Replace existing subparagraph ".5" with the following:

".5 Marine pollutants: Except as provided in 2.10.2.7, if the goods to be transported are marine pollutants, the goods shall be identified as "MARINE POLLUTANT", and for generic or "not otherwise specified" (N.O.S.) entries the Proper Shipping Name shall be supplemented with

the recognized chemical name of the marine pollutant (see 3.1.2.9). The term "MARINE POLLUTANT" may be supplemented with the term "ENVIRONMENTALLY HAZARDOUS";

5.4.1.5 Information required in addition to the dangerous goods description

5.4.1.5.7 *Radioactive material*

5.4.1.5.7.1 Amend subparagraph .6 to read as follows:

".6 For fissile material:

- (i) Shipped under one exception of 2.7.2.3.5.1 to 2.7.2.3.5.6, reference to that paragraph;
- (ii) Shipped under 2.7.2.3.5.1 to 2.7.2.3.5.5, the total mass of fissile nuclides;
- (iii) Contained in a package for which one of 6.4.11.2 (a) to (c) or 6.4.11.3 is applied, reference to that paragraph;
- (iv) The criticality safety index, where applicable."

5.4.1.5.7.1 In subparagraph .7, replace "competent authority approval certificate" with "competent authority certificate of approval" and insert "fissile material excepted under 2.7.2.3.5.6," before "special arrangement".

5.4.1.5.7.3 Replace "competent authorities design or shipment approval" with "competent authority approval of design or shipment".

5.4.1.6 Certification

5.4.1.6.1 In the text of the certification, after "above", insert "/ below\*".

and insert the following footnote:

"\* as appropriate".

#### **5.4.1.5.12 Transport of solid dangerous goods in bulk containers**

5.4.1.5.12 At the end replace the sentence "Bulk container BK2 approved by the competent authority of ..." with the following:

"Bulk container BK(x) approved by the competent authority of ...".

and at the end insert the following note:

**Note:** "(x)" shall be replaced with "1" or "2", as appropriate.

## 5.4.2 Container/vehicle packing certificate

5.4.2.1.8 Amend to read as follows:

- ".8 When substances presenting a risk of asphyxiation are used for cooling or conditioning purposes (such as dry ice (UN 1845) or nitrogen, refrigerated liquid (UN 1977) or argon, refrigerated liquid (UN 1951)), the container/vehicle is externally marked in accordance with 5.5.3.6; and".

## 5.4.3 Documentation required aboard the ship

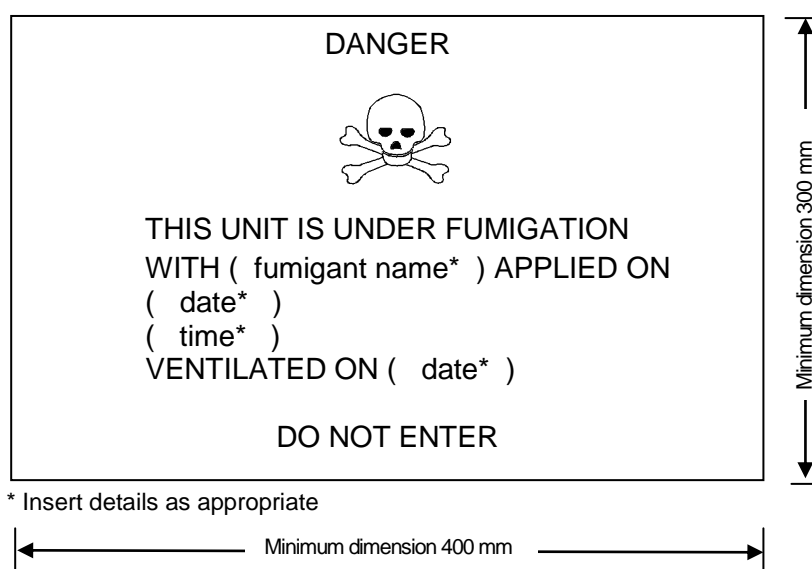
5.4.3.1 The footnote reference in the paragraph "\* FAL.2/Circ.52/Rev.1 may be used for this purpose" is replaced with "Resolution FAL. 10(35), adopted on 16 January 2009, amendments to the annex to the convention on facilitation of international maritime traffic, 1965".

## Chapter 5.5 – Special provisions

### 5.5.2.3 Marking and placarding

Amend 5.5.2.3.2 as follows:

"5.5.2.3.2 The fumigation warning mark shall be as shown in the figure below.



Fumigation warning mark

The marking shall be a rectangle. The minimum dimensions shall be 400 mm wide x 300 mm high and the minimum width of the outer line shall be 2 mm. The marking shall be in black print on a white background with lettering not less than 25 mm high. Where dimensions are not specified, all features shall be in approximate proportion to those shown.

**Note:** The provisions of 5.5.2.3.2 of the IMDG Code (Amendment 36-12) may continue to be applied until 31 December 2016."

**5.5.3 Special provisions applicable to packages and cargo transport units containing substances presenting a risk of asphyxiation when used for cooling or conditioning purposes (such as dry ice (UN 1845) or nitrogen, refrigerated liquid (UN 1977) or argon, refrigerated liquid (UN 1951))**

**5.5.3.1 Scope**

5.5.3 Add a new subparagraph 5.5.3.1.4 to read as follows:

"5.5.3.1.4 Cargo transport units containing substances used for cooling or conditioning purposes include cargo transport units containing substances used for cooling or conditioning purposes inside packages as well as cargo transport units with unpackaged substances used for cooling or conditioning purposes."

**5.5.3.2 General**

5.5.3.2.2 Amend the first sentence as follows:

"5.5.3.2.2 When dangerous goods are loaded in cargo transport units containing substances used for cooling or conditioning purposes any provisions of these Regulations relevant to these dangerous goods apply in addition to the provisions of this section."

5.5.3.2.4 Amend to read as follows:

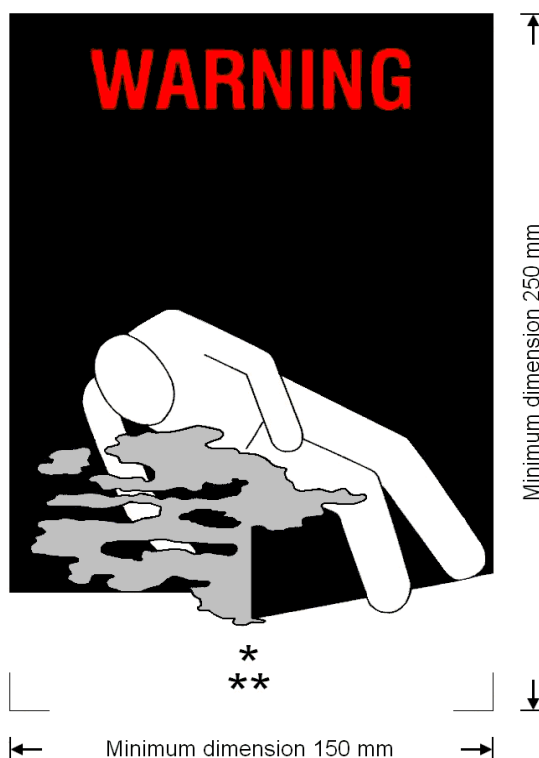
"5.5.3.2.4 Persons engaged in the handling or transport of cargo transport units containing substances used for cooling or conditioning purposes shall be trained commensurate with their responsibilities."

**5.5.3.6 Marking of cargo transport units**

5.5.3.6.1 Add "purposes" after "cooling or conditioning" in the first sentence.

5.5.3.6.2 Amend paragraph to read as follows:

"5.5.3.6.2 The warning mark shall be as shown in the figure below



Coolant/conditioning warning mark for cargo transport units

- \* Insert proper shipping name of the coolant/conditioner. The lettering shall be in capitals, all be on one line and shall be at least 25 mm high. If the length of the proper shipping name is too long to fit in the space provided, the lettering may be reduced to the maximum size possible to fit. For example: CARBON DIOXIDE, SOLID.
- \*\* Insert "AS COOLANT" or "AS CONDITIONER" as appropriate. The lettering shall be in capitals, all be on one line and be at least 25 mm high.

The marking shall be a rectangle. The minimum dimensions shall be 150 mm wide x 250 mm high. The word "WARNING" shall be in red or white and be at least 25 mm high. Where dimensions are not specified, all features shall be in approximate proportion to those shown.

**NOTE:** The provisions of 5.5.3.6.2 of the IMDG Code (Amendment 36-12) may continue to be applied until 31 December 2016."

### 5.5.3.7 Documentation

5.5.3.7.1 Replace "that have been cooled or conditioned" with "containing or have contained substances used for cooling or conditioning purposes".

**PART 6**  
**CONSTRUCTION AND TESTING OF PACKAGINGS, INTERMEDIATE BULK  
CONTAINERS (IBCs), LARGE PACKAGINGS, PORTABLE TANKS,  
MULTIPLE-ELEMENT GAS CONTAINERS (MEGCs)  
AND ROAD TANK VEHICLES**

**Chapter 6.1 – Provisions for the construction and testing of packagings (other than for class 6.2 substances)**

**6.1.1 Applicability and general provisions**

**6.1.1.1 Applicability**

6.1.1.1.4 Amend to read "Packagings for liquids, other than combination packagings, with capacity exceeding 450 L".

**6.1.3 Marking**

6.1.3.1(e) Insert a reference to note "\*" at the centre of the symbol and add the following note under the symbol:

"\* The last two digits of the year of manufacture may be displayed at that place. In such a case, the two digits of the year in the type approval marking and in the inner circle of the clock shall be identical."

and insert a new Note at the end to read as follows:

**"NOTE:** Other methods that provide the minimum required information in a durable, visible and legible form are also acceptable."

**Chapter 6.2 – Provisions for the construction and testing of pressure receptacles, aerosol dispensers, small receptacles containing gas (gas cartridges) and fuel cell cartridges containing liquefied flammable gas**

**6.2.1 General provisions**

**6.2.1.1 Design and construction**

6.2.1.1.5 Add the following new last sentence:

"The test pressure of a cylinder for an adsorbed gas shall be in accordance with packing instruction P208."

**6.2.2 Provisions for UN pressure receptacles**

6.2.2 Add the following new second sentence:

"Manufacture of new pressure receptacles or service equipment according to any particular standard in 6.2.2.1 and 6.2.2.3 is not permitted after the date shown in the right hand column of the tables."

Renumber the existing NOTE as "NOTE 1".



Add the following new note:

**"NOTE 2:** UN pressure receptacles and service equipment constructed according to standards applicable at the date of manufacture may continue in use subject to the periodic inspection provisions of this Code."

### 6.2.2.1 Design, construction and initial inspection and test

6.2.2.1.1 In the table, add a new third column. Add a new first row with the following text:

Reference	Title	Applicable for manufacture
-----------	-------	----------------------------

For ISO Standards "ISO 9809-1:1999", "ISO 9809-2:2000" and "ISO 9809-3:2000", in the third column, add "Until 31 December 2018".

After ISO Standard "ISO 9809-1:1999" add the following new standard:

ISO 9809-1:2010	Gas cylinders -- Refillable seamless steel gas cylinders -- Design, construction and testing -- Part 1: Quenched and tempered steel cylinders with tensile strength less than 1 100 MPa	Until further notice
-----------------	---	----------------------

After ISO Standard "ISO 9809-2:2000" add the following new standard:

ISO 9809-2:2010	Gas cylinders – Refillable seamless steel gas cylinders – Design, construction and testing – Part 2: Quenched and tempered steel cylinders with tensile strength greater than or equal to 1 100 MPa	Until further notice
-----------------	---	----------------------

After ISO Standard "ISO 9809-3:2000" add the following new standard:

ISO 9809-3:2010	Gas cylinders -- Refillable seamless steel gas cylinders -- Design, construction and testing -- Part 3: Normalized steel cylinders	Until further notice
-----------------	--	----------------------

For all the other standards, in the column "Applicable for manufacture", add "Until further notice".

6.2.2.1.2 In the table, add a new third column. Add a new first row with the following text:

Reference	Title	Applicable for manufacture
-----------	-------	----------------------------

For ISO Standard "ISO 11120:1999", in the column "Applicable for manufacture", add "Until further notice".

6.2.2.1.3 Amend the first table to read as follows:

Reference	Title	Applicable for manufacture
ISO 9809-1:1999	Gas cylinders – Refillable seamless steel gas cylinders – Design, construction and testing – Part 1: Quenched and tempered steel cylinders with tensile strength less than 1 100 MPa <b>NOTE:</b> <i>The note concerning the F factor in section 7.3 of this standard shall not be applied for UN cylinders.</i>	Until 31 December 2018
ISO 9809-1:2010	Gas cylinders – Refillable seamless steel gas cylinders – Design, construction and testing – Part 1: Quenched and tempered steel cylinders with tensile strength less than 1 100 MPa	Until further notice
ISO 9809-3:2000	Gas cylinders – Refillable seamless steel gas cylinders – Design, construction and testing – Part 3: Normalized steel cylinders	Until 31 December 2018
ISO 9809-3:2010	Gas cylinders – Refillable seamless steel gas cylinders – Design, construction and testing – Part 3: Normalized steel cylinders	Until further notice

6.2.2.1.3 (second table), 6.2.2.1.4 and 6.2.2.1.5 In the tables, add a new third column. Add a new first row with the following text:

Reference	Title	Applicable for manufacture
-----------	-------	----------------------------

For all the standards, in the column "Applicable for manufacture", add "Until further notice".

6.2.2.1.6 After 6.2.2.1.5 insert the following new paragraphs:

"6.2.2.1.6 The standard shown below applies for the design, construction and initial inspection and test of UN bundles of cylinders. Each cylinder in a UN bundle of cylinders shall be a UN cylinder complying with the requirements of 6.2.2. The inspection requirements related to the conformity assessment system and approval for UN bundles of cylinders shall be in accordance with 6.2.2.5.

Reference	Title	Applicable for manufacture
ISO 10961:2010	Gas cylinders – Cylinder bundles – Design, manufacture, testing and inspection	Until further notice

**NOTE:** Changing one or more cylinders of the same design type, including the same test pressure, in an existing UN bundle of cylinders does not require re-certification of the existing bundle."

"6.2.2.1.7 The following standards apply for the design, construction and initial inspection and test of UN cylinders for adsorbed gases except that the inspection requirements related to the conformity assessment system and approval shall be in accordance with 6.2.2.5.

Reference	Title	Applicable for manufacture
ISO 11513:2011	Gas cylinders – Refillable welded steel cylinders containing materials for sub-atmospheric gas packaging (excluding acetylene) – Design, construction, testing, use and periodic inspection	Until further notice
ISO 9809-1:2010	Gas cylinders – Refillable seamless steel gas cylinders – Design, construction and testing – Part 1: Quenched and tempered steel cylinders with tensile strength less than 1 100 MPa	Until further notice

### 6.2.2.2 Materials

6.2.2.2 Replace "ISO 11114-1:1997" with "ISO 11114-1:2012". In the title for standard "ISO 11114-1:2012", delete "Transportable". Delete the note at the end.

### 6.2.2.3 Service equipment

6.2.2.3 Amend the first table to read as follows:

Reference	Title	Applicable for manufacture
ISO 11117:1998	Gas cylinders – Valve protection caps and valve guards for industrial and medical gas cylinders – Design, construction and tests	Until 31 December 2014
ISO 11117:2008 + Cor 1:2009	Gas cylinders – Valve protection caps and valve guards – Design, construction and tests	Until further notice
ISO 10297:1999	Gas cylinders – Refillable gas cylinder valves – Specification and type testing	Until 31 December 2008
ISO 10297:2006	Gas cylinders – Refillable gas cylinder valves – Specification and type testing	Until further notice
ISO 13340:2001	Transportable gas cylinders – Cylinders valves for non-refillable cylinders – Specification and prototype testing	Until further notice

6.2.2.3 In the second table, add a new third column. Add a new first row with the following text:

Reference	Title	Applicable for manufacture
-----------	-------	----------------------------

For ISO Standard "ISO 16111:2008", in the column "Applicable for manufacture", add "Until further notice".

6.2.2.4 In the table, add a new third column. Add a new first row with the following text:

Reference	Title	Applicable
-----------	-------	------------

For all standards, in the column "Applicable", add "Until further notice".

### 6.2.2.4 Periodic inspection and test

6.2.2.4 In the table of standards for periodic inspection and test, after the entry for "ISO 10462:2005" add the following new entry:

ISO 11513:2011	Gas cylinders – Refillable welded steel cylinders containing materials for sub-atmospheric gas packaging (excluding acetylene) – Design, construction, testing, use and periodic inspection	Until further notice
-------------------	---	----------------------

### 6.2.2.7 Marking of refillable UN pressure receptacles

6.2.2.7 Amend the note to read as follows:

**Note:** Marking requirements for UN metal hydride storage systems are given in 6.2.2.9 and marking requirements for UN bundles of cylinders are given in 6.2.2.10."

6.2.2.7.4 In subparagraph (p) replace "ISO 11114-1:1997" with "ISO 11114-1:2012".

6.2.2.7.9 Is deleted.

### 6.2.2.9 Marking of UN metal hydride storage systems

6.2.2.9.2 In subparagraph (j) replace "ISO 11114-1:1997" with "ISO 11114-1:2012".

### 6.2.2.10 Marking of bundles of cylinders

Add the following new section:

#### **6.2.2.10 Marking of bundles of cylinders**

6.2.2.10.1 Individual cylinders in a bundle of cylinders shall be marked in accordance with 6.2.2.7.

6.2.2.10.2 Refillable UN bundles of cylinders shall be marked clearly and legibly with certification, operational, and manufacturing marks. These marks shall be permanently affixed (e.g. stamped, engraved, or etched) on a plate permanently attached to the frame of the bundle of cylinders. Except for the UN packaging symbol, the minimum size of the marks shall be 5 mm. The minimum size of the UN packaging symbol shall be 10 mm.

6.2.2.10.3 The following marks shall be applied:

- (a) The certification marks specified in 6.2.2.7.2 (a), (b), (c), (d) and (e);
- (b) The operational marks specified in 6.2.2.7.3 (f), (i), (j) and the total of the mass of the frame of the bundle and all permanently attached parts (cylinders, manifold, fittings and valves). Bundles intended for the carriage of UN 1001 acetylene, dissolved and UN 3374 acetylene, solvent free shall bear the tare mass as specified in clause B.4.2 of ISO 10961:2010; and
- (c) The manufacturing marks specified in 6.2.2.7.4 (n), (o) and, where applicable, (p).

6.2.2.10.4 The marks shall be placed in three groups:

- (a) The manufacturing marks shall be the top grouping and shall appear consecutively in the sequence given in 6.2.2.10.3 (c);
- (b) The operational marks in 6.2.2.10.3 (b) shall be the middle grouping and the operational mark specified in 6.2.2.7.3 (f) shall be immediately preceded by the operational mark specified in 6.2.2.7.3 (i) when the latter is required;
- (c) Certification marks shall be the bottom grouping and shall appear in the sequence given in 6.2.2.10.3 (a)."

#### **6.2.4 Provisions for aerosol dispensers, small receptacles containing gas (gas cartridges) and fuel cell cartridges containing liquefied flammable gas**

6.2.4 In the heading, delete the word "flammable". Insert the following text after the heading:

"Each filled aerosol dispenser or gas cartridge or fuel cell cartridge shall be subjected to a test in a hot water bath in accordance with 6.2.4.1 or an approved water bath alternative in accordance with 6.2.4.2."

#### **6.2.4.1 Small receptacles containing gas (gas cartridges) and fuel cell cartridges containing liquefied flammable gas**

Delete 6.2.4.1, 6.2.4.1.1 and 6.2.4.1.2, heading 6.2.4.2 and the text under this heading.

Renumber heading 6.2.4.2.1 as 6.2.4.1.

#### **6.2.4.2 Aerosol dispensers**

##### *6.2.4.2.1 Hot water bath test*

6.2.4.2.1.1 Renumber as 6.2.4.1.1. In the first sentence, after "capacity of the aerosol dispenser" insert ", gas cartridge or fuel cell cartridge". In the second sentence, after "to heat or if aerosol dispensers" insert "gas cartridges or fuel cell cartridges" and after "one aerosol dispenser," insert "gas cartridge or fuel cell cartridge".

6.2.4.2.1.2 Renumber as 6.2.4.1.2. After the first "aerosol dispenser" insert ", receptacle or fuel cell cartridge". After the second "aerosol dispenser" insert ", gas cartridge or fuel cell cartridge".

Renumber heading 6.2.4.2.2 as 6.2.4.2 and, in the text under this heading, replace "of 6.2.4.2.2.1, 6.2.4.2.2.2 and 6.2.4.2.2.3" by "of 6.2.4.2.1 and, as appropriate, 6.2.4.2.2 or 6.2.4.2.3".

##### *6.2.4.2.2 Alternative methods*

6.2.4.2.2.1 Renumber as 6.2.4.2.1. In the first sentence, after "Aerosol dispenser" insert ", gas cartridge or fuel cell cartridge". In the second sentence, after "that all aerosol dispensers" insert ", gas cartridges or fuel cell cartridges" In indent (f) insert the following text at the end ", gas cartridges or fuel cell cartridges".

Before 6.2.4.2.2.2, insert the following text "6.2.4.2.2 Aerosol dispensers".

6.2.4.2.2.2 *Pressure and leak testing of aerosol dispensers before filling*

6.2.4.2.2.2 Renumber as 6.2.4.2.2.1. Replace "Every" with "Each" at the beginning of the first sentence.

6.2.4.2.2.3 *Testing of the aerosol dispensers after filling*

6.2.4.2.2.3 Renumber as 6.2.4.2.2.2.

Add a new 6.2.4.2.3 to read as follows:

"6.2.4.2.3 Gas cartridges and fuel cell cartridges

6.2.4.2.3.1 Pressure testing of gas cartridges and fuel cell cartridges

Each gas cartridge or fuel cell cartridge shall be subjected to a test pressure equal to or in excess of the maximum expected in the filled receptacle at 55°C (50°C if the liquid phase does not exceed 95% of the capacity of the receptacle at 50°C). This test pressure shall be that specified for the gas cartridge or fuel cell cartridge and shall not be less than two thirds the design pressure of the gas cartridge or fuel cell cartridge. If any gas cartridge or fuel cell cartridge shows evidence of leakage at a rate equal to or greater than  $3.3 \times 10^{-2}$  mbar.l.s<sup>-1</sup> at the test pressure or distortion or any other defect, it shall be rejected.

6.2.4.2.3.2 Leak testing gas cartridges and fuel cell cartridges

Prior to filling and sealing, the filler shall ensure that the closures (if any), and the associated sealing equipment are closed appropriately and the specified gas is used.

Each filled gas cartridge or fuel cell cartridge shall be checked for the correct mass of gas and shall be leak tested. The leak detection equipment shall be sufficiently sensitive to detect at least a leak rate of  $2.0 \times 10^{-3}$  mbar.l.s<sup>-1</sup> at 20°C.

Any gas cartridge or fuel cell cartridge that has gas masses not in conformity with the declared mass limits or shows evidence of leakage or deformation, shall be rejected."

**Chapter 6.4 – Provisions for the construction, testing and approval of packages and material of class 7**

In the title, replace "class 7" with "radioactive material".

**6.4.2 General provisions**

6.4.2.11 Insert a new paragraph 6.4.2.11 to read as follows:

"6.4.2.11 A package shall be so designed that it provides sufficient shielding to ensure that, under routine conditions of transport and with the maximum radioactive contents that the package is designed to contain, the radiation level at any point on the external surface of the package would not exceed the values specified in 2.7.2.4.1.2, 4.1.9.1.10 and 4.1.9.1.11, as applicable, with account taken of 7.1.4.5.3.3 and 7.1.4.5.5".

Current paragraphs 6.4.2.11 and 6.4.2.12 become 6.4.2.12 and 6.4.2.13 respectively.

### **6.4.3 Additional provisions for packages transported by air**

6.4.3.3 Replace "leakage" with "loss or dispersal of radioactive contents from the containment system,".

### **6.4.6 Provisions for packages containing uranium hexafluoride**

6.4.6.1 Amend the first sentence to read as follows:

"Packages designed to contain uranium hexafluoride shall meet the requirements which pertain to the radioactive and fissile properties of the material prescribed elsewhere in this Code."

6.4.6.2 In subparagraphs .1 and .3, insert at the end: "except as allowed in 6.4.6.4".

6.4.6.4 In the introductory sentence replace "the approval of the competent authority" with "multilateral approval" and insert "the packages are designed:" at the end, after "if".

and in subparagraphs (a) and (b) delete "the packages are designed" and replace "and" with "and/or" at the end. In subparagraph (c), delete "for packaged designed" and replace "hexafluoride, the packages" with "hexafluoride and the packages".

### **6.4.8 Provisions for Type B(U) packages**

6.4.8.1 Amend to read as follows:

"6.4.8.1 Type B(U) packages shall be designed to meet the requirements specified in 6.4.2, the requirements specified in 6.4.3 if carried by air, and of 6.4.7.2 to 6.4.7.15, except as specified in 6.4.7.14 (a), and, in addition, the requirements specified in 6.4.8.2 to 6.4.8.15."

6.4.8.2 Amend the end of the introductory paragraph to read: "...which may cause one or more of the following:". And in (a) and (b), delete "or" at the end.

6.4.8.8 In subparagraph (b), replace "and the tests in" with "and either the test in."

### **6.4.9 Provisions for Type B(M) packages**

6.4.9.1 In the first sentence, replace "6.4.8.4, 6.4.8.5 and 6.4.8.6," with "6.4.8.4 to 6.4.8.6". And in the second sentence, insert "6.4.8.4 and" after "packages specified in".

### **6.4.10 Provisions for Type C packages**

6.4.10.3 Amend to read as follows:

"6.4.10.3 A package shall be so designed that, if it were at the maximum normal operating pressure and subjected to:

- (a) The tests specified in 6.4.15, it would restrict the loss of radioactive contents to not more than  $10^{-6}$  A<sub>2</sub> per hour; and
- (b) The test sequences in 6.4.20.1,

- (i) it would retain sufficient shielding to ensure that the radiation level at 1 m from the surface of the package would not exceed 10 mSv/h with the maximum radioactive contents which the package is designed to contain; and
- (ii) it would restrict the accumulated loss of radioactive contents in a period of 1 week to not more than 10 A<sub>2</sub> for krypton-85 and not more than A<sub>2</sub> for all other radionuclides."

The text of last paragraph remains unchanged.

#### **6.4.11 Provisions for packages containing fissile material**

6.4.11.1 In (a), insert "routine," before "normal".

6.4.11.1 Amend (b)(i) to read as follows: "of 6.4.7.2 except for unpackaged material when specifically allowed by 2.7.2.3.5.5;"

6.4.11.1 In (b)(ii) delete "and" at the end.

6.4.11.1 Amend (b)(iii) to read as follows: "of 6.4.7.3 unless the material is excepted by 2.7.2.3.5;"

6.4.11.1 Insert a new (b) (iv) to read as follows:

"(iv) of 6.4.11.4 to 6.4.11.14, unless the material is excepted by 2.7.2.3.5, 6.4.11.2 or 6.4.11.3."

6.4.11.2 Amend to read as follows:

"6.4.11.2 Packages containing fissile material that meet the provisions of subparagraph (d) and one of the provisions of (a) to (c) below are excepted from the requirements of 6.4.11.4 to 6.4.11.14.

(a) Packages containing fissile material in any form provided that:

- (i) The smallest external dimension of the package is not less than 10 cm;
- (ii) The criticality safety index of the package is calculated using the following formula:

$$CSI = 50 \times 5 \times \left( \frac{\text{Mass of U - 235 in package (g)}}{Z} + \frac{\text{Mass of other fissile nuclides * in package (g)}}{280} \right)$$

\* Plutonium may be of any isotopic composition provided that the amount of Pu-241 is less than that of Pu-240 in the package

where the values of Z are taken from table 6.4.11.2.

- (iii) The CSI of any package does not exceed 10;

(b) Packages containing fissile material in any form provided that:



- (i) The smallest external dimension of the package is not less than 30 cm;
- (ii) The package, after being subjected to the tests specified in 6.4.15.1 to 6.4.15.6;
  - Retains its fissile material contents;
  - Preserves the minimum overall outside dimensions of the package to at least 30 cm;
  - Prevents the entry of a 10 cm cube.
- (iii) The criticality safety index of the package is calculated using the following formula:

$$CSI = 50 \times 2 \times \left( \frac{\text{Mass of U-235 in package (g)}}{Z} + \frac{\text{Mass of other fissile nuclides * in package (g)}}{280} \right)$$

\* Plutonium may be of any isotopic composition provided that the amount of Pu-241 is less than that of Pu-240 in the package.

where the values of Z are taken from table 6.4.11.2.

- (iv) The criticality safety index of any package does not exceed 10;
- (c) Packages containing fissile material in any form provided that:
- (i) The smallest external dimension of the package is not less than 10 cm;
  - (ii) The package, after being subjected to the tests specified in 6.4.15.1 to 6.4.15.6;
    - Retains its fissile material contents;
    - Preserves the minimum overall outside dimensions of the package to at least 10 cm;
    - Prevents the entry of a 10 cm cube.
  - (iii) The CSI of the package is calculated using the following formula:

$$CSI = 50 \times 2 \times \left( \frac{\text{Mass of U-235 in package (g)}}{450} + \frac{\text{Mass of other fissile nuclides * in package (g)}}{280} \right)$$

\* Plutonium may be of any isotopic composition provided that the amount of Pu-241 is less than that of Pu-240 in the package.

- (iv) The maximum mass of fissile nuclides in any package does not exceed 15 g;

- (d) The total mass of beryllium, hydrogenous material enriched in deuterium, graphite and other allotropic forms of carbon in an individual package shall not be greater than the mass of fissile nuclides in the package except where their total concentration does not exceed 1 g in any 1,000 g of material. Beryllium incorporated in copper alloys up to 4% in weight of the alloy does not need to be considered."

Table 6.4.11.2 Insert a new table 6.4.11.2 to read as follows:

"Table 6.4.11.2 Values of Z for calculation of criticality safety index in accordance with 6.4.11.2

Enrichement <sup>a</sup>	Z
Uranium enriched up to 1.5%	2200
Uranium enriched up to 5%	850
Uranium enriched up to 10%	660
Uranium enriched up to 20%	580
Uranium enriched up to 100%	450

<sup>a</sup> *If a package contains uranium with varying enrichments of U-235, then the value corresponding to the highest enrichment shall be used for Z.*

"

6.4.11.3 Insert a new paragraph 6.4.11.3 to read as follows:

"6.4.11.3 Packages containing not more than 1 000 g of plutonium are excepted from the application of 6.4.11.4 to 6.4.11.14 provided that:

- (a) Not more than 20% of the plutonium by mass is fissile nuclides;
- (b) The criticality safety index of the package is calculated using the following formula:

$$CSI = 50 \times 2 \times \frac{\text{mass of plutonium(g)}}{1000}$$

- (c) If uranium is present with the plutonium, the mass of uranium shall be no more than 1% of the mass of the plutonium."

Current paragraphs 6.4.11.3 to 6.4.11.13 become new paragraphs 6.4.11.4 to 6.4.11.14.

6.4.11.4 (former 6.4.11.3) Replace "6.4.11.7 to 6.4.11.12" with "6.4.11.8 to 6.4.11.13".

6.4.11.5 (former 6.4.11.4) Replace "6.4.11.7 to 6.4.11.12" with "6.4.11.8 to 6.4.11.13" and insert "either" at the end of the introductory sentence.

6.4.11.8 (former 6.4.11.7), in the last sentence of the introductory paragraph, insert "either of" before "the following:" and in subparagraph (a) and (b) (i), replace "6.4.11.12 (b)" with "6.4.11.13 (b)".

6.4.11.9 (former 6.4.11.8), in the last sentence replace "6.4.11.12 (b)" with "6.4.11.13 (b)" and "6.4.11.9 (c)" with "6.4.11.10 (c)".

6.4.11.10 (former 6.4.11.9) In the introductory sentence replace "6.4.11.7 and 6.4.11.8" with "6.4.11.8 and 6.4.11.9".

6.4.11.10 (former 6.4.11.9) In subparagraph (b), replace "6.4.11.11 (b)" with "6.4.11.12 (b)". In (c), replace "6.4.11.12 (b)" with "6.4.11.13 (b)".

6.4.11.11 (former 6.4.11.10) In subparagraph (b), replace "6.4.11.9" with "6.4.11.10" and "6.4.11.7" with "6.4.11.8".

6.4.11.13 (former 6.4.11.12) In subparagraph (c), replace "6.4.11.12 (b)" with "6.4.11.13(b)".

6.4.11.14 (former 6.4.11.13) Replace "6.4.11.11 and 6.4.11.12" with "6.4.11.12 and 6.4.11.13".

#### **6.4.13 Testing the integrity of the containment system and shielding and evaluating criticality safety**

6.4.13 In subparagraph (c) replace "6.4.11.13" with "6.4.11.14".

#### **6.4.15 Test for demonstrating ability to withstand normal conditions of transport**

6.4.15.5 In subparagraph (a), amend the beginning to read: "The equivalent of 5 times ...".

#### **6.4.17 Tests for demonstrating ability to withstand accident conditions of transport**

6.4.17.2 In the introductory paragraph, replace "6.4.11.12" with "6.4.11.13".

6.4.17.2 In subparagraph (b), move the phrase "so as to suffer maximum damage" to the end of the sentence after "on the target".

6.4.17.2 In subparagraph (c), insert the following new third sentence: "The lower face of the steel plate shall have its edges and corners rounded off to a radius of not more than 6 mm."

#### **6.4.19 Water leakage test for packages containing fissile material**

6.4.19.1 Replace "6.4.11.7 to 6.4.11.12" with "6.4.11.8 to 6.4.11.13".

6.4.19.2 Replace "6.4.11.12" with "6.4.11.13".

#### **6.4.20 Tests for Type C packages**

6.4.20.2 In the first sentence, insert "vertical" before "solid". In the second sentence replace "the probe to the surface of the specimen shall be as to cause" with "the package specimen and the impact point on the package surface shall be such as to cause".

#### **6.4.22 Approvals of package designs and materials**

6.4.22.4 Amend to read as follows:

"6.4.22.4 Each package design for fissile material which is not excepted by any of the paragraphs 2.7.2.3.5.1 to 2.7.2.3.5.6, 6.4.11.2 and 6.4.11.3 shall require multilateral approval."

6.4.22.6 Insert a new paragraph 6.4.22.6 to read as follows:

"6.4.22.6 The design for a fissile material excepted from "FISSILE" classification in accordance with 2.7.2.3.5.6 shall require multilateral approval."

6.4.22.7 Insert a new paragraph to read as follows:

"6.4.22.7 Alternative activity limits for an exempt consignment of instruments or articles in accordance with 2.7.2.2.2 shall require multilateral approval."

#### **6.4.23 Applications for approval and approvals for radioactive material transport**

6.4.23.2 In the introductory sentence replace "shipment approval" with "approval of shipment".

In subparagraph .3, amend the end of the paragraph to read as follows:

"... referred to in the certificate of approval for the package design, if applicable, issued under 5.1.5.2.1.1.3, 5.1.5.2.1.1.6 or 5.1.5.2.1.1.7, are to be put into effect."

6.4.23.4 In (f), insert "nuclear" after "irradiated" and replace "6.4.11.4 (b)" with "6.4.11.5 (b)". In (i), replace "quality assurance programme" with "management system" and "1.1.2.3.1" with "1.5.3.1".

6.4.23.5 In the introductory sentence, delete "for package approval".

in subparagraph (a), replace "6.4.8.4, 6.4.8.5, 6.4.8.6" with "6.4.8.4 to 6.4.8.6".

and in subparagraph (d), amend the beginning of the sentence to read: "a statement of the range".

6.4.23.6 Replace "quality assurance programme" with "management system".

6.4.23.7 Replace "quality assurance programme" with "management system".

6.4.23.8 In subparagraph (d) replace "quality assurance programme" with "management system".

6.4.23.9 Insert a new paragraph to read as follows:

"6.4.23.9 An application for approval of design for fissile material excepted from "FISSILE" classification in accordance with table 2.7.2.1.1, under 2.7.2.3.5.6 shall include:

- (a) A detailed description of the material; particular reference shall be made to both physical and chemical states;

- (b) A statement of the tests that have been carried out and their results, or evidence based on calculation methods to show that the material is capable of meeting the requirements specified in 2.7.2.3.6;
- (c) A specification of the applicable management system as required in 1.5.3.1;
- (d) A statement of specific actions to be taken prior to shipment."

6.4.23.10 Insert a new paragraph to read as follows:

"6.4.23.10 An application for approval of alternative activity limits for an exempt consignment of instruments or articles shall include:

- (a) An identification and detailed description of the instrument or article, its intended uses and the radionuclide(s) incorporated;
- (b) The maximum activity of the radionuclide(s) in the instrument or article;
- (c) Maximum external radiation levels arising from the instrument or article;
- (d) The chemical and physical forms of the radionuclide(s) contained in the instrument or article;
- (e) Details of the construction and design of the instrument or article, particularly as related to the containment and shielding of the radionuclide in routine, normal and accident conditions of transport;
- (f) The applicable management system, including the quality testing and verification procedures to be applied to radioactive sources, components and finished products to ensure that the maximum specified activity of radioactive material or the maximum radiation levels specified for the instrument or article are not exceeded, and that the instruments or articles are constructed according to the design specifications;
- (g) The maximum number of instruments or articles expected to be shipped per consignment and annually;
- (h) Dose assessments in accordance with the principles and methodologies set out in the International Basic Safety Standards for Protection against Ionizing Radiation and for the Safety of Radiation Sources, Safety Series No.115, IAEA, Vienna (1996), including individual doses to transport workers and members of the public and, if appropriate, collective doses arising from routine, normal and accident conditions of transport, based on representative transport scenarios the consignments are subject to."

Current paragraphs 6.4.23.9 to 6.4.23.11 become new paragraphs 6.4.23.11 to 6.4.23.13.

6.4.23.11 (former 6.4.23.9), in the introductory sentence, replace "approval certificate" with "certificate of approval".

6.4.23.11 (former 6.4.23.9) (a), replace "6.4.23.10 (b)" with "6.4.23.12 (b)".

6.4.23.11 (former 6.4.23.9) (b) Insert "or alternative activity limit for exempt consignment" at the end of the first sentence. Amend the second sentence to read: "The identification mark of the approval of shipment shall be clearly related to the identification mark of the approval of design."

6.4.23.11 (former 6.4.23.9) (c) In the introductory sentence, replace "types of approval certificates" with "types of certificate of approval". Insert the following line between those corresponding to LD and T: "FE Fissile material complying with the requirements of 2.7.2.3.6". Add the following line at the end of the list: "AL Alternative activity limits for an exempt consignment of instruments or articles".

6.4.23.11 (former 6.4.23.9) (d) Insert "certificates of approval of" before "package design", delete (twice) "approval certificates" after "radioactive material", and replace "6.4.24.2 to 6.4.24.4" with "6.4.24.2 to 6.4.24.5".

6.4.23.12 (former 6.4.23.10) In the introductory sentence replace "type codes" with "identification marks".

6.4.23.12 (former 6.4.23.10) (a) Replace "6.4.23.9 (a), (b), (c) and (d)" with "6.4.23.11 (a), (b), (c) and (d)"; "design approval" with "approval of design", and "shipment approval" with "the approval of shipment".

6.4.23.12 (former 6.4.23.10) (a) For A/132/B(M)F-96, replace "package design approval certificate" with "certificate of approval for the package design".

6.4.23.12 (former 6.4.23.10) (a) For A/132/B(M)F-96T, replace "shipment approval" with "approval of shipment".

6.4.23.12 (former 6.4.23.10) (a) For A/137/X, replace "a special arrangement approval" with "an approval of special arrangement".

6.4.23.12 (former 6.4.23.10) (a) For A/139/IF-96 and A/145/H(U)-96, replace "package design approval certificate" with "certificate of approval for the package design".

6.4.23.12 (former 6.4.23.10) (b) Replace "according to 6.4.23.16" with "in accordance with 6.4.23.20".

6.4.23.12 (former 6.4.23.10) (c) Replace (twice) "package design approval certificate" with "certificate of approval for the package design"; and "approval certificate" with "certificate of approval" in the last sentence.

6.4.23.13 (former 6.4.23.11) In the introductory sentence replace "approval certificate" with "certificate of approval" and in (i) replace "quality assurance programme" with "management system".

6.4.23.14 Insert a new paragraph to read as follows:

"6.4.23.14 Each certificate of approval issued by a competent authority for material excepted from classification as "FISSILE" shall include the following information:

- (a) Type of certificate;
- (b) The competent authority identification mark;
- (c) The issue date and an expiry date;
- (d) List of applicable national and international regulations, including the edition of the IAEA Regulations for the Safe Transport of Radioactive Material under which the exception is approved;
- (e) A description of the excepted material;
- (f) Limiting specifications for the excepted material;
- (g) A specification of the applicable management system as required in 1.5.3.1;
- (h) Reference to information provided by the applicant relating to specific actions to be taken prior to shipment;
- (i) If deemed appropriate by the competent authority, reference to the identity of the applicant;
- (j) Signature and identification of the certifying official;
- (k) Reference to documentation that demonstrates compliance with 2.7.2.3.6."

Current paragraphs 6.4.23.12 to 6.4.23.14 become new paragraphs 6.4.23.15 to 6.4.23.17.

6.4.23.15 (former 6.4.23.12), in the introductory sentence replace "approval certificate" with "certificate of approval".

6.4.23.15 (former 6.4.23.12) (j), replace "amounts" with "mass" and amend the end of the paragraph to read as follows: "... special form radioactive material, low dispersible radioactive material or fissile material excepted under 2.7.2.3.5.6 if applicable;".

6.4.23.15 (former 6.4.23.12) (k)(v), replace "6.4.11.4 (b)" with "6.4.11.5(b)".

6.4.23.15 (former 6.4.23.12) (r), replace "quality assurance programme" with "management system".

6.4.23.16 (former 6.4.23.13), in the introductory sentence, replace "approval certificate" with "certificate of approval".

6.4.23.16 (former 6.4.23.13) (i), replace "design approval certificate(s)" with "certificate(s) of approval of design".

6.4.23.16 (former 6.4.23.13) (g), replace "amounts" with "mass" and amend the end of the paragraph to read as follows: "...special form radioactive material, low dispersible radioactive material or fissile material excepted under 2.7.2.3.5.6 if applicable;"

6.4.23.16 (former 6.4.23.13) (l), replace "quality assurance programme" with "management system".

6.4.23.17 (former 6.4.23.14), in the introductory sentence, replace "approval certificate" with "certificate of approval".

6.4.23.17 (former 6.4.23.14) (h), replace "shipment approval" with "approval of shipment".

6.4.23.17 (former 6.4.23.14) (l), amend the end of the second sentence to read as follows: "... mass in grams (for fissile material the total mass of fissile nuclides or the mass for each fissile nuclide, when appropriate) and whether special form radioactive material, low dispersible radioactive material or fissile material excepted under 2.7.2.3.5.6, if applicable;"

6.4.23.17 (former 6.4.23.14) (n), amend the introductory sentence to read as follows: "For package designs containing fissile material which require multilateral approval of the package design in accordance with 6.4.22.4:"

6.4.23.17 (former 6.4.23.14) (n)(vi), replace "6.4.11.4 (b)" with "6.4.11.5 (b)".

6.4.23.17 (former 6.4.23.14) (t), replace "quality assurance programme" with "management system".

6.4.23.18 Insert a new paragraph 6.4.23.18 to read as follows:

"6.4.23.18 Each certificate issued by a competent authority for alternative activity limits for an exempt consignment of instruments or articles according to 5.1.5.2.1.4 shall include the following information:

- (a) Type of certificate;
- (b) The competent authority identification mark;
- (c) The issue date and an expiry date;
- (d) List of applicable national and international regulations, including the edition of the IAEA Regulations for the Safe Transport of Radioactive Material under which the exemption is approved;
- (e) The identification of the instrument or article;
- (f) A description of the instrument or article;
- (g) Design specifications for the instrument or article;
- (h) A specification of the radionuclide(s), the approved alternative activity limit(s) for the exempt consignment(s) of the instrument(s) or article(s);



- (i) Reference to documentation that demonstrates compliance with 2.7.2.2.2.2;
- (j) If deemed appropriate by the competent authority, reference to the identity of the applicant;
- (k) Signature and identification of the certifying official."

Current paragraphs 6.4.23.15 and 6.4.23.16 become 6.4.23.19 and 6.4.23.20 respectively.

#### **6.4.24 Transitional measures for class 7**

6.4.24.1 Amend to read as follows:

"Packages not requiring competent authority approval of design (excepted packages, Type IP-1, Type IP-2, Type IP-3 and Type A packages) shall meet these Regulations in full, except that packages that meet the requirements of the 1985 or 1985 (as amended 1990) Editions of IAEA Regulations for the Safe Transport of Radioactive Material (IAEA Safety Series No.6):

- (a) May continue in transport provided that they were prepared for transport prior to 31 December 2003, and subject to the requirements of 6.4.24.4, if applicable;
- (b) May continue to be used provided that:
  - (i) They were not designed to contain uranium hexafluoride;
  - (ii) The applicable requirements of 1.5.3.1 of this Code are applied;
  - (iii) The activity limits and classification in Chapter 2.7 of these Regulations are applied;
  - (iv) The requirements and controls for transport in Parts 1, 3, 4, 5 and 7 of this Code are applied;
  - (v) The packaging was not manufactured or modified after 31 December 2003."

6.4.24.2 Amend to read as follows:

"6.4.24.2 Packages requiring competent authority approval of the design shall meet the provisions of this Code in full unless the following conditions are met:

- (a) The packagings were manufactured to a package design approved by the competent authority under the provisions of the 1973 or 1973 (as amended) or the 1985 or 1985 (as amended 1990) Editions of IAEA Safety Series No.6);
- (b) The package design is subject to multilateral approval;
- (c) The applicable requirements of 1.5.3.1 of this Code are applied;

- (d) The activity limits and classification in Chapter 2.7 of this Code are applied;
- (e) The requirements and controls for transport in in Parts 1, 3, 4, 5 and 7 of this Code are applied;
- (f) For a package containing fissile material and transported by air, the requirement of 6.4.11.11 is met;
- (g) For packages that meet the requirements of the 1973 or 1973 (as amended) Editions of IAEA Safety Series No. 6:
  - (i) The packages retain sufficient shielding to ensure that the radiation level at 1 m from the surface of the package would not exceed 10 mSv/h in the accident conditions of transport defined in the 1973 Revised or 1973 Revised (as amended) Editions of IAEA Safety Series No.6 with the maximum radioactive contents which the package is authorized to contain;
  - (ii) The packages do not utilize continuous venting;
  - (iii) A serial number in accordance with the provision of 5.2.1.5.5 is assigned to and marked on the outside of each packaging."

6.4.24.3 Amend to read as follows:

"No new manufacture of packagings to a package design meeting the provisions of the 1973, 1973 (as amended), 1985, and 1985 (as amended 1990) Editions of IAEA Safety Series No.6 shall be permitted to commence."

6.4.24.4 Insert a new paragraph to read as follows:

"6.4.24.4 Packages excepted from the requirements for fissile materials under the Regulations annexed to the 16th revised edition or the seventeenth revised edition of the United Nations Recommendations on the Transport of Dangerous Goods (2009 Edition of IAEA Safety Standard Series No.TS-R-1)

6.4.24.4 Packages containing fissile material that is excepted from classification as "FISSILE" according to 2.7.2.3.5.1 (i) or (iii) of the IMDG Code amendment 35-10) or amendment 36-12, (paragraphs 417 (a) (i) or (iii) of the 2009 Edition of IAEA Regulations for the Safe Transport of Radioactive Material) prepared for transport before 31 December 2014 may continue in transport and may continue to be classified as non-fissile or fissile-excepted except that the consignment limits in table 2.7.2.3.5 of these editions shall apply to the conveyance. The consignment shall be transported under exclusive use."

and current paragraph 6.4.24.4 becomes new 6.4.24.5.

6.4.24.5 (former 6.4.24.4) In the first sentence, replace "programme of quality assurance" with "management system". Replace the last sentence with the following: "No new manufacture of such special form radioactive material shall be permitted to commence."

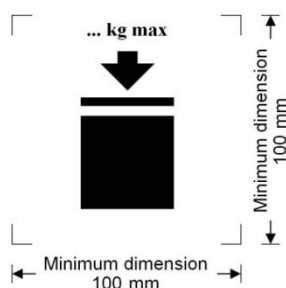
## Chapter 6.5 – Provisions for the construction and testing of intermediate bulk containers (IBCs)

### 6.5.2 Marking

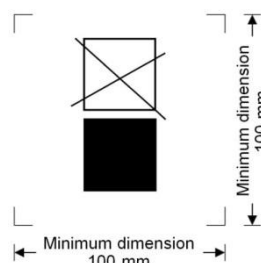
#### 6.5.2.2 Additional marking

Amend 6.5.2.2.2 to read as follows:

"6.5.2.2.2 The maximum permitted stacking load applicable when the IBC is in use shall be displayed on a symbol as shown in the figures below. The symbol shall be durable and clearly visible.



IBCs capable of being stacked



IBCs NOT capable of being stacked

The minimum dimensions shall be 100 mm x 100 mm. The letters and numbers indicating the mass shall be at least 12 mm high. The area within the printer's marks indicated by the dimensional arrows shall be square. Where dimensions are not specified, all features shall be in approximate proportion to those shown. The mass marked above the symbol shall not exceed the load imposed during the design type test (see 6.5.6.6.4) divided by 1.8.

**NOTE:** The provisions of 6.5.2.2.2 shall apply to all IBCs manufactured, repaired or remanufactured as from 1 January 2011. The provisions of 6.5.2.2.2 of the IMDG Code (Amendment 36-12) may continue to be applied to all IBCs manufactured, repaired or remanufactured between 1 January 2011 and 31 December 2016."

6.5.2.2.4 After "The date of the manufacture of the plastics inner receptacle may alternatively be marked on the inner receptacle adjacent to the remainder of the marking." add the following new sentence: "In such a case, the two digits of the year in the primary marking and in the inner circle of the clock shall be identical.". At the end, add a new "Note" to read as follows:

"**Note:** Other methods that provide the minimum required information in a durable, visible and legible form are also acceptable."


## Chapter 6.6 – Provisions for the construction and testing of large packagings

### 6.6.2 Code for designating types of large packagings

6.6.2.2 At the beginning, replace "The letter "W"" with "The letters "T" or "W"" and insert a new second sentence to read as follows: "The letter "T" signifies a large salvage packaging conforming to the requirements of 6.6.5.1.9."

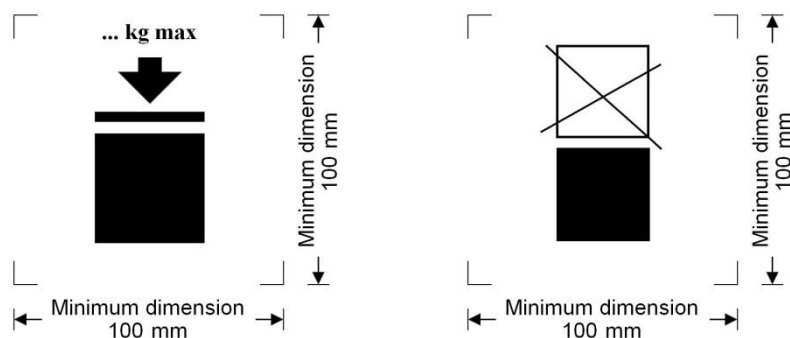
### 6.6.3 Marking

6.6.3.2 Insert a new second example to read as follows:

"  50AT/Y/05/01/B/PQRS For a large steel salvage packaging suitable for stacking; stacking load: 2 500 kg; maximum gross mass: 1,000 kg."

Amend 6.6.3.3 to read as follows:

"6.6.3.3 The maximum permitted stacking load applicable when the large packaging is in use shall be displayed on a symbol as shown in the figures below. The symbol shall be durable and clearly visible.



Large packagings capable of being stacked

Large packagings NOT capable of being stacked

The minimum dimensions shall be 100 mm x 100 mm. The letters and numbers indicating the mass shall be at least 12 mm high. The area within the printer's marks indicated by the dimensional arrows shall be square. Where dimensions are not specified, all features shall be in approximate proportion to those shown. The mass marked above the symbol shall not exceed the load imposed during the design type test (see 6.6.5.3.3.4) divided by 1.8.

**NOTE:** The provisions of 6.6.3.3 shall apply to all large packagings manufactured, repaired or remanufactured as from 1 January 2015. The provisions of 6.6.3.3 of the IMDG Code (Amendment 36-12) may continue to be applied to all IBCs manufactured, repaired or remanufactured between 1 January 2015 and 31 December 2016."

## **6.6.5 Test provisions for large packagings**

### **6.6.5.1 Performance and frequency of test**

6.6.5.1.9 Insert the following new paragraph to read as follows:

*"6.6.5.1.9 Large salvage packagings*

Large salvage packagings shall be tested and marked in accordance with the provisions applicable to packing group II large packagings intended for the transport of solids or inner packagings, except as follows:

- (a) The test substance used in performing the tests shall be water, and the large salvage packagings shall be filled to not less than 98% of their maximum capacity. It is permissible to use additives, such as bags of lead shot, to achieve the requisite total package mass so long as they are placed so that the test results are not affected. Alternatively, in performing the drop test, the drop height may be varied in accordance with 6.6.5.3.4.4.2 (b);
- (b) Large salvage packagings shall, in addition, have been successfully subjected to the leakproofness test at 30 kPa, with the results of this test reflected in the test report required by 6.6.5.4; and
- (c) Large salvage packagings shall be marked with the letter "T" as described in 6.6.2.2."

## **Chapter 6.7 – Provisions for the design, construction, inspection and testing of portable tanks and multiple-element gas containers (ME GCs)**

### **6.7.2 Provisions for the design, construction, inspection and testing of portable tanks intended for the transport of substances of class 1 and classes 3 to 9**

6.7.2.20.2, 6.7.3.16.2 and 6.7.5.13.2 Replace "shall be marked" with "shall be durably marked".

### **6.7.5 Provisions for the design, construction, inspection and testing of multiple-element gas containers (MEGCs) intended for the transport of non-refrigerated gases**

6.7.5.2.4.1 Replace "ISO 11114-1:1997" with "ISO 11114-1:2012".

## **Chapter 6.9 - Provisions for the design, construction, inspection and testing of bulk containers**

6.9.4.6 Delete the footnote "\*" assigned to BK, and insert the following note at the end:

**Note:** "(x)" shall be replaced with "1" or "2", as appropriate.

**PART 7**  
**PROVISIONS CONCERNING TRANSPORT OPERATIONS**

**Chapter 7.1 – General stowage provisions**

**7.1.3 Stowage categories**

**7.1.3.1 Stowage categories for class 1**

7.1.3.1 In the paragraph replace the words "column 16" with "16a".

**7.1.3.2 Stowage categories for classes 2 to 9**

7.1.3.2 In the paragraph replace the words "column 16" with "16a".

**7.1.4 Special stowage provisions**

**7.1.4.1 Stowage of empty uncleaned packagings, including IBCs and large packagings**

7.1.4.1 In the paragraph replace the words "column 16" with "16a"

**7.1.4.5 Stowage of goods of class 7**

7.1.4.5.2 Replace "approval certificate" with "certificate of approval".

7.1.4.5.3.1 In the table amend the two first rows under the heading to read as follows:

Freight container	
Small freight container	50
Large freight container	50

and in the note "a" to the table, replace "7.1.4.5.6" with "7.1.4.5.5".

7.1.4.5.3.4 In the table amend the two first rows under the heading to read as follows:

Freight container		
Small freight container	50	n.a
Large freight container	50	100

Amend the end of note "b" to the table to read as follows: "... and stowed so as to maintain a spacing of at least 6 m from other groups."

and amend the end of the first sentence of note "c" to the table to read as follows: "... and stowed so as to maintain a spacing of at least 6 m from other groups."

7.1.4.5.10 Amend the end of the paragraph to read as follows:

"... and shall not be re-used unless the following conditions are fulfilled:

- .1 the non-fixed contamination shall not exceed the limits specified in 4.1.9.1.2;

- .2 the radiation level resulting from the fixed contamination shall not exceed 5 µSv/h at the surface."

7.1.4.5.13.2 Delete " to the critical group".

### 7.1.5 Stowage Codes

7.1.5 Insert a new 7.1.5 with the following:

#### "7.1.5 Stowage Codes

The stowage codes given in column 16a of the dangerous goods list are as specified below:

Stowage Code	Description
SW1	Protected from sources of heat.
SW2	Clear of living quarters.
SW3	Shall be transported under temperature control.
SW4	Surface ventilation is required to assist in removing any residual solvent vapour.
SW5	If under deck, stow in a mechanically ventilated space.
SW6	When stowed under-deck, mechanical ventilation shall be in accordance with SOLAS regulation II-2/19 (II-2/54) for flammable liquids with flashpoint below 23°C c.c.
SW7	As approved by the competent authorities of the countries involved in the shipment
SW8	Ventilation may be required. The possible need to open hatches in case of fire to provide maximum ventilation and to apply water in an emergency, and the consequent risk to the stability of the ship through flooding of the cargo spaces, shall be considered before loading.
SW9	Provide a good through ventilation for bagged cargo. Double strip stowage is recommended. The illustration in 7.6.2.7.2.3 shows how this can be achieved. During the voyage regular temperature readings shall be taken at varying depths in the hold and recorded. If the temperature of the cargo exceeds the ambient temperature and continues to increase, ventilation shall be closed down.

<b>Stowage Code</b>	<b>Description</b>
SW10	Unless carried in closed cargo transport units, bales shall be properly covered by tarpaulins or the like. Cargo spaces shall be clean, dry and free from oil or grease. Ventilator cowls leading into the cargo space shall have sparking-preventing screens. All other openings, entrances and hatches leading to the cargo space shall be securely closed. During temporary interruption of loading, when the hatch remains uncovered, a fire-watch shall be kept. During loading or discharge, smoking in the vicinity shall be prohibited and fire-fighting appliances kept ready for immediate operation.
SW11	Cargo transport units shall be shaded from direct sunlight. Packages in cargo transport units shall be stowed so as to allow for adequate air circulation throughout the cargo.
SW12	taking account of any supplementary requirements specified in the transport documents.
SW13	taking account of any supplementary requirements specified in the competent authority approval certificate(s).
SW14	Category A only if the special stowage provisions of 7.4.1.4 and 7.6.2.8.4 are complied with
SW15	For metal drums, stowage category B.
SW16	For unit loads in open cargo transport units, stowage category B.
SW17	Category E, for closed cargo transport unit and pallet boxes only. Ventilation may be required. The possible need to open hatches in case of fire to provide maximum ventilation and to apply water in an emergency, and the consequent risk to the stability of the ship through flooding of the cargo space, shall be considered before loading.
SW18	Category A, when transported in accordance with P650.
SW19	For batteries transported in accordance with SP 376 or SP 377 Category C, unless transported on a short international voyage.
SW20	For uranyl nitrate hexahydrate solution stowage category D applies.
SW21	For uranium metal pyrophoric and thorium metal pyrophoric stowage category D applies.
SW22	For AEROSOLS with a maximum capacity of 1 litre: Category A. For AEROSOLS with a capacity above 1 litre: Category B. For WASTE AEROSOLS: Category C, Clear of living quarters.
SW23	When transported in BK3 bulk container, see 7.6.2.12 and 7.7.3.9.
SW24	For special stowage provisions see 7.4.1.3 and 7.6.2.7.2.



Stowage Code	Description
SW25	For special stowage provisions see 7.6.2.7.3.
SW26	For special stowage provisions see 7.4.1.4 and 7.6.2.11.1.1.
SW27	For special stowage provisions see 7.6.2.7.2.1.
SW28	As approved by the competent authority of the country of origin.

"

### 7.1.6 Handling Codes

7.1.6 Insert a new 7.1.6 with the following:

#### "7.1.6 Handling Codes

The handling codes given in column 16a of the dangerous goods list are as specified below:

Handling Codes	Description
H1	Keep as dry as reasonably practicable
H2	Keep as cool as reasonably practicable
H3	During transport, it should be stowed (or kept) in a cool ventilated place
H4	If cleaning of cargo spaces has to be carried out at sea, the safety procedures followed and standard of equipment used shall be at least as effective as those employed as industry best practice in a port. Until such cleaning is undertaken, the cargo spaces in which the asbestos has been carried shall be closed and access to those spaces shall be prohibited.

"

## Chapter 7.2 – General segregation provisions

### 7.2.3 Segregation provisions

7.2.3.1 In the paragraph, replace twice the words "column 16" with "column 16b".

7.2.3.4 In the paragraph, replace the words "column 16" with "column 16b".

### 7.2.4 Segregation table

in the row "Flammable gases 2.1" versus column of class 4.3 replace "X" with "2".

in the row "Flammable liquid 3" versus column of class 4.3 replace "1" with "2".

in the row "Substances which, in contact with water, emit flammable gases 4.3" versus column 2.1 replace "X" with "2".

in the row "Substances which, in contact with water, emit flammable gases 4.3" versus column 3 replace "1" with "2".

### **7.2.5 Segregation groups**

7.2.3.1 In the paragraph, replace the words "column 16 (stowage and segregation)" with "column 16b"

### **7.2.6 Special segregation provisions and exemptions**

7.2.6.4 In the paragraph, replace the words "column 16" with "column 16b".  
and in "examples" replace "column 16" with "column 16b".

### **7.2.8 Segregation Codes**

7.2.8 Insert a new 7.2.8 with the following:

#### **"7.2.8 Segregation Codes**

The segregation codes given in column 16b of the dangerous goods list are as specified below:

<b>Segregation Codes</b>	<b>Description</b>
SG1	For packages carrying a subsidiary risk of class 1, segregation as for class 1, division 1.3.
SG2	Segregation as for class 1.2G
SG3	Segregation as for Class 1.3G
SG4	Segregation as for class 2.1
SG5	Segregation as for class 3
SG6	Segregation as for class 5.1
SG7	Stow "away from" class 3
SG8	Stow "away from" class 4.1
SG9	Stow "away from" class 4.3
SG10	Stow "away from" class 5.1
SG11	Stow "away from" class 6.2
SG12	Stow "away from" class 7
SG13	Stow "away from" class 8

<b>Segregation Codes</b>	<b>Description</b>
SG14	Stow "separated from" class 1 except for division 1.4S
SG15	Stow "separated from" class 3
SG16	Stow "separated from" class 4.1
SG17	Stow "separated from" class 5.1
SG18	Stow "separated from" class 6.2
SG19	Stow "separated from" class 7
SG20	Stow "away from" acids
SG21	Stow "away from" alkalis
SG22	Stow "away from" ammonium salts
SG23	Stow "away from" animal or vegetable oils
SG24	Stow "away from" azides
SG25	Stow "separated from" goods of classes 2.1 and 3.
SG26	In addition: from goods of classes 2.1 and 3 when stowed on deck of a containership a minimum distance of two container spaces athwartship shall be maintained, when stowed on ro-ro ships a distance of 6 m athwartship shall be maintained.
SG27	Stow "away from" explosives containing chlorates or perchlorates
SG28	Stow "away from" ammonium compounds and explosives containing ammonium compounds or salts
SG29	Segregation from foodstuffs as in 7.3.4.2.2, 7.6.3.1.2 or 7.7.3.7.
SG30	Stow "away from" heavy metals and their salts
SG31	Stow "away from" lead and its compounds
SG32	Stow "away from" liquid halogenated hydrocarbons
SG33	Stow "away from" powdered metals
SG34	When containing ammonium compounds, "away from" chlorates or perchlorates and explosives containing chlorates or perchlorates.
SG35	Stow "separated from" acids.

<b>Segregation Codes</b>	<b>Description</b>
SG36	Stow "separated from" alkalis.
SG37	Stow "separated from" ammonia.
SG38	Stow "separated from" ammonium compounds.
SG39	Stow "separated from" ammonium compounds other than AMMONIUM PERSULPHATE (UN 1444).
SG40	Stow "separated from" ammonium compounds other than mixtures of ammonium persulphates and/or potassium persulphates and/or sodium persulphates.
SG41	Stow "separated from" animal or vegetable oil.
SG42	Stow "separated from" bromates.
SG43	Stow "separated from" bromine.
SG44	Stow "separated from" CARBON TETRACHLORIDE (UN 1846).
SG45	Stow "separated from" chlorates.
SG46	Stow "separated from" chlorine.
SG47	Stow "separated from" chlorites.
SG48	Stow "separated from" combustible material (particularly liquids). Combustible material does not include packing materials or dunnage.
SG49	Stow "separated from" cyanides
SG50	Segregation from foodstuffs as in 7.3.4.2.1, 7.6.3.1.2 or 7.7.3.6.
SG51	Stow "separated from" hypochlorites
SG52	Stow "separated from" iron oxide
SG53	Stow "separated from" liquid organic substances
SG54	Stow "separated from" mercury and mercury compounds
SG55	Stow "separated from" mercury salts
SG56	Stow "separated from" nitrites
SG57	Stow "separated from" odour-absorbing cargoes

Segregation Codes	Description
SG58	Stow "separated from" perchlorates
SG59	Stow "separated from" permanganates
SG60	Stow "separated from" peroxides
SG61	Stow "separated from" powdered metals
SG62	Stow "separated from" sulphur
SG63	Stow "separated longitudinally by an intervening complete compartment or hold from" Class 1.
SG64	<i>Reserved</i>
SG65	Stow "separated by a complete compartment or hold from" class 1 except for division 1.4.
SG66	<i>Reserved</i>
SG67	Stow "separated from" division 1.4 and "separated longitudinally by an intervening complete compartment or hold from" divisions 1.1, 1.2, 1.3, 1.5 and 1.6 except from explosives of compatibility group J.
SG68	If flashpoint 60°C c.c. or below, segregation as for class 3, but "away from" class 4.1.
SG69	For AEROSOLS with a maximum capacity of 1 litre: Segregation as for class 9. Stow "separated from" class 1 except for division 1.4. For AEROSOLS with a capacity above 1 litre: Segregation as for the appropriate subdivision of class 2. For WASTE AEROSOLS: Segregation as for the appropriate subdivision of class 2.
SG70	For arsenic sulphides, "separated from" acids
SG71	Within the appliance, to the extent that the dangerous goods are integral parts of the complete life-saving appliance, there is no need to apply the provisions on segregation of substances in chapter 7.2.
SG72	See 7.2.6.3.2.
SG73	<i>Reserved</i>
SG 74	Segregation as for 1.4G.
SG 75	Stow "separated from" strong acids.

"

## **Annex Segregation flow chart**

In the boxes, replace the words "column 16" with "column 16b",

### **Chapter 7.3 – Consigning operations concerning the packing and use of cargo transport units (CTUs) and related provisions**

#### **7.3.2 General provisions for cargo transport units**

7.3.2.2 In the paragraph delete reference to footnote "\*\* See IMO publication, sales number IB282E"

#### **7.3.3 Packing of cargo transport units**

7.3.3.1 The existing paragraph "7.3.3.1" is renumbered as "7.3.3.2".

7.3.3.1 Insert a new "7.3.3.1" with the following:

"7.3.3.1 Prior to the use of a cargo transport unit it shall be checked to ensure that it is apparently fit for its intended purpose\*."

and add the corresponding footnote as follows:

"\* For safety approval plates and maintenance and examination of containers see the International Convention for Safe Containers, 1972, as amended annex I regulations 1 and 2 (see 1.1.2.3)."

7.3.3.2 The existing "7.3.3.2" is renumbered as "7.3.3.3", and at the end, the following new sentence is added:

"Whenever the handling provision "keep as dry as reasonably practicable" (H1) is assigned in column (16a) of the dangerous goods list, the cargo transport unit including any contained goods, securing or packing materials shall be kept as dry as reasonably practicable."

#### **7.3.4.2 Segregation in relation to foodstuffs**

7.3.4.2.1 In the paragraph, replace the words "column 16" with "column 16b".

7.3.4.2.2 In subparagraph ".4", replace the words "column 16" with "column 16b".

#### **7.3.7 Cargo transport units under temperature control**

##### **7.3.7.2 General provisions**

7.3.7.2.4 Replace existing paragraph with the following:

"7.3.7.2.4 Prior to the use of cargo transport unit, the refrigeration system shall be subjected to a thorough inspection and a test to ensure that all parts are functioning properly.

7.3.7.2.4.1 Refrigerant gas shall only be replaced in accordance with the manufacturer's operating instructions for the refrigeration system. Prior to filling replacement refrigerant gas, a certificate of analysis from the supplier shall be obtained and checked to confirm that the

gas meets refrigeration system specifications. In addition, if concerns about the integrity of the supplier and/or the refrigerant gas supply chain give rise to suspicion to contamination of the gas, the replacement refrigerant gas shall be checked for possible contamination prior to use. If the refrigerant gas is found to be contaminated it shall not be used, the cylinder shall be plainly marked "CONTAMINATED", the cylinder shall be sealed and sent for recycling or disposal and notification shall be given to the refrigerant gas supplier and authorized distributor and competent authority(ies) of the countries to which the supplier and distributor reside, as appropriate. The date of last refrigerant replacement shall be included in the maintenance record of the refrigeration system.

**Note:** Contamination can be checked by using flame halide lamp tests, gas sniffer tube tests or gas chromatography. Replacement refrigerant gas cylinders may be marked with the test result and the date of testing."

## **Chapter 7.4 – Stowage and segregation on containerships**

### **7.4.2 Stowage requirements**

#### **7.4.2.4 Ventilation provisions**

7.4.2.4.1 In the paragraph, replace the words "column 16" with "column 16a".

## **Chapter 7.6 – Stowage and segregation on general cargo ships**

### **7.6.2 Stowage and handling provisions**

#### **7.6.2.3 Ventilation provisions**

7.6.2.3.1 In the paragraph, replace the words "column 16" with "column 16a".

### **7.6.3 Segregation provisions**

#### **7.6.3.1 Segregation from foodstuffs**

7.6.3.1.2 In the paragraph, replace the words "column 16" with "column 16b".

## **Chapter 7.7 – Shipborne barges on barge-carrying ships**

### **7.7.3 Barge loading**

7.7.3.6 In the paragraph, replace the words "column 16" with "column 16b".

7.7.3.7 In subparagraph ".4", replace the words "column 16" with "column 16b".

### **7.7.4 Stowage of shipborne barges**

7.7.4.1 In the paragraph, replace the words "column 16" with "column 16a".