

# International Maritime Dangerous Goods (IMDG) Code, 2016 Edition

## Amendment 38-16

### Corrigenda December 2017

This corrigenda makes editorial corrections to the English version of the IMDG Code (Amendment 38-16, as adopted by resolution MSC.409(96)).

## Volume 1

### PART 1 – GENERAL PROVISIONS, DEFINITIONS AND TRAINING

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

##### 1.2.1 Definitions

In the definition of *Self-accelerating decomposition temperature (SADT)*, *replace* the second sentence *with* “The self-accelerating decomposition temperature (SADT) shall be determined in accordance with Part II of the Manual of Tests and Criteria.”

### PART 2 – CLASSIFICATION

#### Chapter 2.3 Class 3 – Flammable liquids

##### 2.3.2 Assignment of packing group

2.3.2.2.1 In the first column of the table, in the last line, *replace* “700 < t” *with* “700 < v”.

#### Chapter 2.7 Class 7 – Radioactive material

##### 2.7.2 Classification

##### 2.7.2.3 Determination of other material characteristics

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

2.7.2.3.2.1.2 At the end of the subparagraph .2, *replace* “or” *with* “and”.

2.7.2.3.2.2.2 At the end of the subparagraph .2, *replace* “or” *with* “and”.

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

##### 2.7.2.4.1 Classification as excepted package

2.7.2.4.1.2 In table 2.7.2.4.1.2, *replace* “Item limits<sup>a</sup>” *with* “Item limits<sup>a</sup>”, “Package limits<sup>a</sup>” *with* “Package limits<sup>a</sup>” *and also replace* “Material package limits<sup>a</sup>” *with* “Material package limits<sup>a</sup>”.

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

### **2.9.3** Environmentally hazardous substances (aquatic environment)

#### **2.9.3.4** Mixtures classification categories and criteria

##### **2.9.3.4.6** Summation method

2.9.3.4.6.3.1 Add a full stop “.” at the end of the paragraph.

## **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

4.1.1.10 In the table, in the column for packing group, for entry UN 2056 Tetrahydrofuran, *replace* “I” *with* “II”, and for entry UN 2247 *n*-Decane, *replace* “II” *with* “III”.

#### **4.1.4** List of packing instructions

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

P002 In special packing provision PP11, *replace* “UN Nos. 1361 and 1362, 5M1 bags” *with* “and UN 1362, 5H1, 5L1 and 5M1 bags”.

P200 In paragraph (2)(a), *replace* the words “name and description” *with* the words “proper shipping name”.

P200 In paragraph (3)(a) *replace* the reference to “(4)” *with* “(5)”, to read as follows:

“(a) For compressed gases, the working pressure shall be not more than two thirds of the test pressure of the pressure receptacles. Restrictions to this upper limit on working pressure are imposed by special packing provision “o” in (5) below. In no case shall the internal pressure at 65°C exceed the test pressure.”

In paragraph (3)(b) and (b)(i) *replace* the reference to “(4)” *with* “(5)”, to read as follows:

“(b) For high pressure liquefied gases, the filling ratio shall be such that the settled pressure at 65°C does not exceed the test pressure of the pressure receptacles.

The use of test pressures and filling ratios other than those in the table is permitted, except where (5), special packing provision “o” applies, provided that:

(i) the criterion of (5), special packing provision “r” is met when applicable; or”

In paragraph (3)(d) *replace* the reference to “(4)” *with* “(5)” to read as follows:

“(d) For UN 1001, acetylene, dissolved, and UN 3374 acetylene, solvent free, see (5), special packing provision “p”.”

P403 In special packing provision PP31, after 2813, *delete* “(PG I)”.

P410 In special packing provision PP40, *delete* “1398,” and “1403,”.

P603 In the special provision, *delete* “and 6.4.11.2”.

## PART 5 – CONSIGNMENT PROCEDURES

### Chapter 5.1 General provisions

#### 5.1.1 Application and general provisions

*Renumber* the current paragraphs 5.1.1.3.1, 5.1.1.3.2, 5.1.1.3.3 and 5.1.1.4 as the new paragraphs 5.1.1.3, 5.1.1.4, 5.1.1.5 and 5.1.1.6.

#### 5.1.2 Use of overpacks and unit loads

5.1.2.1 *Replace* the word “markings” *with* the word “marks” twice and *replace* the word “marking” with the word “mark”.

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

In the second sentence of the note below the heading of chapter 5.2, *replace* the word “markings” *with* the word “marks”.

#### 5.2.1 Marking of packages including IBCs

##### 5.2.1.10 Lithium battery mark

5.2.1.10.2 In the last paragraph, after “black on white”, *insert* “or suitable contrasting background”.

#### 5.2.2 Labelling of packages including IBCs

##### 5.2.2.1 Labelling provisions

5.2.2.1.2.1 *Replace* “Fishmeal” with “Fish meal”. In the corresponding footnote, *replace* “fishmeal” with “fish meal” twice.

5.2.2.1.3 *Replace* the second sentence with the following sentences:

“However, for label model No. 9A, the upper half of the label shall only contain the seven vertical stripes of the symbol and the lower half shall contain the group of batteries of the symbol and the class number. Except for label model No. 9A, the label may include such text as the UN number, or words describing the hazard class (e.g. “flammable”) in accordance with 5.2.2.1.5 provided that the text does not obscure or detract from the other required label elements.”

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

#### 5.3.2 Marking of cargo transport units

##### 5.3.2.0 Display of proper shipping name

5.3.2.0.2 In the first sentence, *replace* the words “not more than 65 mm” *with* the words “not less than 65 mm”. In the third sentence, *replace* the words “capacity of less than” with the words “capacity of not more than”.

### Chapter 5.4 Documentation

#### 5.4.4 Other required information and documentation

5.4.4.1.2 *Replace* the word “fishmeal” *with* “fish meal”, and *replace* the word “seedcake” *with* “seed cake”.

## **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)

#### **6.1.2** Code for designating types of packagings

6.1.2.7 In the table, the two cells in column “paragraph” for section “B Aluminium” of “1 Drums” should be *merged*.

#### **6.1.3** Marking

6.1.3.7 *Replace* the word “markings” *with* the word “marks”.

### **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

##### **6.2.1.5** Initial inspection and test

6.2.1.5.2 In the second paragraph, *replace* “in 6.2.1.5.1, .7, .8, and .9,” *with* “in 6.2.1.5.1.7, .8, and .9.”

### **Chapter 6.3** Provisions for the construction and testing of packagings for class 6.2 infectious substances of category A

#### **6.3.4** Marking

6.3.4.2 Under (f) *replace* “,” *with* “and”. Under (g) at the end, *replace* “,” *with* “.” and *delete* “(h) each element of the marking applied in accordance with subparagraphs (a) to (g).”

### **Chapter 6.4** Provisions for the construction, testing and approval of packages for radioactive material and for the approval of such material

#### **6.4.2** General provisions

6.4.2.11 In the fourth line, *replace* “4.1.9.1.10 and 4.1.9.1.11” *with* “4.1.9.1.11 and 4.1.9.1.12”.

#### **6.4.23** Applications for approval and approvals for radioactive material transport

6.4.23.12(a) In the fourth line of the paragraph, *replace* “identification marking” *with* “identification mark”.

6.4.23.19 *Replace* “under 6.4.22.2, 6.4.22.3, 6.4.22.4, 6.4.24.2 and 6.4.24.3” *with* “under 6.4.22.2, 6.4.22.3, 6.4.22.4 and 6.4.24.2”.

### **Chapter 6.5** Provisions for the construction and testing of intermediate bulk containers (IBCs)

#### **6.5.2** Marking

##### **6.5.2.1** Primary marking

6.5.2.1.2 *Delete* the following last sentence: “Each element of the marking applied in accordance with subparagraphs .1 to .8 and with 6.5.2.2 shall be clearly separated, such as by a slash or space, so as to be easily identifiable.”.

## **6.5.5 Specific provisions for IBCs**

### **6.5.5.5 Specific provisions for fibreboard IBCs**

- 6.5.5.5.3 Replace the words “The fluting or corrugated fibreboard” with the words “The fluting of corrugated fibreboard”.

### **6.5.5.6 Specific provisions for wooden IBCs**

- 6.5.5.6.4 *Replace* the paragraph with the following:

“Natural wood shall be well seasoned, commercially dry and free from defects that would materially lessen the strength of any part of the IBC. Each part of the IBC shall consist of one piece or be equivalent thereto. Parts are considered equivalent to one piece, when:

a suitable method of glued assembly, as for instance Lindermann joint, tongue and groove joint, ship lap or rabbet joint is used; or

a butt joint with at least two corrugated metal fasteners at each joint is used; or

other methods at least equally effective are used.”

## **Chapter 6.6 Provisions for the construction and testing of large packagings**

### **6.6.5 Test provisions for large packagings**

#### **6.6.5.1 Performance and frequency of test**

##### **6.6.5.1.9 Large salvage packagings**

- 6.6.5.1.9 (b) *Replace* “required by 6.6.5.4.” with “required by 6.6.5.4; and”.

## **Chapter 6.7 Provisions for the design, construction, inspection and testing of portable tanks and multiple-element gas containers (MEGCs)**

### **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**

#### **6.7.2.1 Definitions**

- 6.7.2.1.2.3 In the definitions of *Design pressure*, *replace* “, but not less than 0.35 bar.” with “, but not less than 0.35 bar; or”.

### **6.7.3 Provisions for the design, construction, inspection and testing of portable tanks intended for the transport of non-refrigerated liquefied gases of class 2**

#### **6.7.3.8 Capacity of relief devices**

- 6.7.3.8.1.1 In the footnote, *replace* the word “tempratures” with “temperatures”.

#### **6.7.3.9 Marking of pressure relief devices**

- 6.7.3.9.2 *Replace* “ISO 4126 1:2004” with “ISO 4126-1:2004”.

## PART 7 – PROVISIONS CONCERNING TRANSPORT OPERATIONS

### Chapter 7.1 General stowage provisions

#### 7.1.4 Special stowage provisions

##### 7.1.4.3 Stowage of limited quantities and excepted quantities

*Replace the words “sections 3.4 and 3.5” with “chapters 3.4 and 3.5”.*

### Chapter 7.2 General segregation provisions

#### 7.2.7 Segregation of goods of class 1

##### 7.2.7.2 Segregation from goods of other classes

7.2.7.2.1 *Replace the words “AMMONIUM NITRATE FERTILIZERS” with “AMMONIUM NITRATE BASED FERTILIZER”.*

#### 7.2.8 Segregation codes

In the entry for SG72, *replace “See 7.2.6.3.2.” by “See tables in 7.2.6.3.”.*

#### Annex

##### Segregation flow chart

##### Examples

- 2.3 *Replace the words “For UN 1489, column 16b of the Dangerous Goods List states: “separated from” ammonium compounds and cyanides”” with “For UN 1489, column 16b of the Dangerous Goods List states “SG38” (“separated from” ammonium compounds) and “SG49” (“separated from” cyanides)”.*
- 2.4 *Replace the words “For UN 1653, column 16b of the Dangerous Goods List states: “separated from” acids”” with “For UN 1653, column 16b of the Dangerous Goods List states “SG35” (“separated from” acids)”.*
- 3.5 *Replace the words “For UN 1183, column 16b of the Dangerous Goods List states: “segregation as for class 3 but “away from” classes 3, 4.1 and 8”” with “For UN 1183, column 16b of the Dangerous Goods List states “SG5” (segregation as for class 3), “SG8” (“away from” class 4.1), “SG13” (“away from” class 8), “SG25” (“separated from” goods of classes 2.1 and 3) and “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)”.*
- 3.6 *Replace the words “as UN 1183 is required to be “away from” class 3, the substances are required to be “away from” one another” with “as UN 1183 is required to be “separated from” class 3, the substances are required to be “separated from” one another. In addition, when these substances are stowed on deck of a containership a minimum distance of two container spaces athwartship shall be maintained, and when they are stowed on ro-ro ships a distance of 6 m athwartship shall be maintained”.*

### 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

7.3.2.3 *Replace the word “requirement” with “requirements”.*

#### 7.3.7 Cargo transport units under temperature control

7.3.7.2.1 In the table, in column SADT, *delete the symbol cross and the corresponding footnote.*

## **Chapter 7.4 Stowage and segregation on containerships**

### **7.4.1 Introduction**

7.4.1.1 *Replace the word “term” with “terms”.*

7.4.1.3 *Replace the word “FISHMEAL” with “FISH MEAL” twice.*

## **Chapter 7.5 Stowage and segregation on ro-ro ships**

### **7.5.2 Stowage provisions**

7.5.2.11 *Replace the words “II 2/37” with “II-2/37”.*

## **Chapter 7.6 Stowage and segregation on general cargo ships**

### **7.6.2 Stowage and handling provisions**

#### **7.6.2.7 Provisions for classes 4.1, 4.2 and 4.3**

7.6.2.7.2 *Replace the word “FISHMEAL” with “FISH MEAL” twice.*

7.6.2.7.3.1 *Replace the word “fishmeal” with “fish meal”.*

#### **7.6.2.11 Stowage of goods of class 9**

7.6.2.11.2 *Replace the word “FISHMEAL” with “FISH MEAL”.*

7.6.2.11.2.1 *Replace the word “FISHMEAL” with “FISH MEAL”.*

## **Chapter 7.8 Special requirements in the event of an incident and fire precautions involving dangerous goods**

### **7.8.6 Special fire precautions for class 1**

*Renumber the current paragraphs 7.8.6.1.1, 7.8.6.1.2 and 7.8.6.1.3 as the new paragraphs 7.8.6.1, 7.8.6.2 and 7.8.6.3.*

### **7.8.7 Special fire precautions for class 2**

*Renumber the current paragraphs 7.8.7.3.1 and 7.8.7.3.2 as the new paragraphs 7.8.7.3 and 7.8.7.4.*

# Volume 2

## PART 3 – DANGEROUS GOODS LIST, SPECIAL PROVISIONS AND EXCEPTIONS

### Chapter 3.2 Dangerous Goods List

In the Dangerous Goods List, *amend* the following entries as follows:

UN No.	Amendment
0500	in column 15, <i>replace</i> “S-Y” with “S-X”
0501	in column 15, <i>replace</i> “S-X” with “S-Y”
1324	in column 15, <i>replace</i> “F-G” with “F-A”
1333	in column 2, <i>replace</i> “CERIUM slabs, ingots or rods” with “CERIUM, slabs, ingots or rods”
1374 (Packaging group II only)	in column 2, <i>replace</i> the word “FISHMEAL” with “FISH MEAL” and <i>replace</i> the word “FISHSCRAP” with “FISH SCRAP”
1374 (Packaging group III only)	in column 2, <i>replace</i> the word “FISHMEAL” with “FISH MEAL” and <i>replace</i> the word “FISHSCRAP” with “FISH SCRAP”
1396 (Packaging group III only)	in column 9, <i>delete</i> “PP40”
1398 (Packaging group III only)	in column 9, <i>delete</i> “PP40”
1402 (Packaging group I only)	in column 9, <i>delete</i> “PP40”
1403 (Packaging group III only)	in column 9, <i>delete</i> “PP40”
1405 (Packaging group III only)	in column 9, <i>delete</i> “PP40”
1418 (Packaging group II only)	in column 15, <i>replace</i> “F-G” with “F-G”
1418 (Packaging group III only)	in column 15, <i>replace</i> “F-G” with “F-G”
1712	in column 2, <i>replace</i> “ZINC ARSENATE or ZINC ARSENITE or ZINC ARSENATE, ZINC ARSENITE MIXTURE” with “ZINC ARSENATE or ZINC ARSENITE or ZINC ARSENATE AND ZINC ARSENITE MIXTURE”
2216	in column 2, <i>replace</i> the word “FISHMEAL” with “FISH MEAL” and <i>replace</i> the word “FISHSCRAP” with “FISH SCRAP”
2383	in column 16a, <i>insert</i> “SW1”
2441	in column 9, <i>insert</i> “PP31”
2465	in column 2, <i>replace</i> “or DICHLOROISOCYANURIC ACID, SALTS” with “or DICHLOROISOCYANURIC ACID SALTS”
2735 (Packaging group I only)	in column 15, <i>replace</i> “F-E” with “F-A”
2870 (Packaging group I only)	in column 15, <i>replace</i> “F-G” with “F-G”
2908	in column 6, <i>insert</i> “368”
2913	in column 6, <i>insert</i> “325”
3132 (Packaging group III only)	in column 9, <i>delete</i> “PP 40”
3208 (Packaging group III only)	in column 9, <i>delete</i> “PP 40”
3326	in column 6, <i>insert</i> “326”
3391 (Packaging group I only)	in column 16b, <i>add</i> “SG72”
3392 (Packaging group I only)	in column 16b, <i>add</i> “SG72”
3393 (Packaging group I only)	in column 16b, <i>add</i> “SG72”



UN No.	Amendment
3394 (Packaging group I only)	in column 16b, <i>add</i> “SG72”
3395 (Packaging group I only)	in column 16b, <i>add</i> “SG72”
3395 (Packaging group II only)	in column 16b, <i>add</i> “SG72”
3395 (Packaging group III only)	in column 16b, <i>add</i> “SG72”
3396 (Packaging group I only)	in column 16b, <i>add</i> “SG72”
3396 (Packaging group II only)	in column 16b, <i>add</i> “SG72”
3396 (Packaging group III only)	in column 16b, <i>add</i> “SG72”
3397 (Packaging group I only)	in column 16b, <i>add</i> “SG72”
3397 (Packaging group II only)	in column 16b, <i>add</i> “SG72”
3397 (Packaging group III only)	in column 16b, <i>add</i> “SG72”
3398 (Packaging group I only)	in column 16b, <i>add</i> “SG72”
3398 (Packaging group II only)	in column 16b, <i>add</i> “SG72”
3398 (Packaging group III only)	in column 16b, <i>add</i> “SG72”
3399 (Packaging group I only)	in column 16b, <i>add</i> “SG72”
3399 (Packaging group II only)	in column 16b, <i>add</i> “SG72”
3399 (Packaging group III only)	in column 16b, <i>add</i> “SG72”
3400 (Packaging group II only)	in column 16b, <i>add</i> “SG72”
3400 (Packaging group III only)	in column 16b, <i>add</i> “SG72”
3482	in column 15, <i>replace</i> “F-G” with “ <u>F-G</u> ”
3513	in column 15, <i>replace</i> the dot “.” with a comma “,”
3530	in column 17, <i>delete</i> the words “or fuel cells”

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

*Amend* the following special provisions:

SP 207 *Replace* “Moulding compounds” with “Plastics moulding compounds”.

SP 225 In the second paragraph, *delete* the second sentence. *Add* a new third paragraph as follows:

“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 369 In the first paragraph, *replace* “with radioactive material” by “with radioactivity”. In the end of the second paragraph, *replace* “2.7.2.3.6” with “2.7.2.3.5”.

SP 384 At the end, before the note, *insert* “However, for placarding of cargo transport units, the placard shall correspond to Model No. 9.”

SP 907 *Replace* the word “Fishmeal” with “Fish meal” once, and *replace* “fishmeal” with “fish meal” two times.

SP 928 *Replace* the word “fishmeal” with “fish meal” three times.

SP 945 *Replace* the word “fishmeal” with “fish meal”.

## Chapter 3.4 Dangerous goods packed in limited quantities

### 3.4.1 General

3.4.1.2.5 *Replace “5.1.1.4” with “5.1.1.6” (see also amendments to chapter 5.1.1 below).*

### 3.4.5 Marking and placarding

3.4.5.5.4 *Replace “The marking shall” with “The mark shall”.*

## APPENDICES

### Appendix A List of generic and N.O.S. proper shipping names

In the table for “Class 4.1”, *move* the following entries for polymerizing substances from generic entries to specific entries:

4.1	3531	POLYMERIZING SUBSTANCE, SOLID, STABILIZED, N.O.S.
4.1	3532	POLYMERIZING SUBSTANCE, LIQUID, STABILIZED, N.O.S.
4.1	3533	POLYMERIZING SUBSTANCE, SOLID, TEMPERATURE CONTROLLED, N.O.S.
4.1	3534	POLYMERIZING SUBSTANCE, LIQUID, TEMPERATURE CONTROLLED, N.O.S.”

## INDEX

In the alphabetical index, *amend* the following entries as indicated hereunder:

In the entry for “Arsenates, liquid, N.O.S., inorganic, *see*”, *replace* “N.O.S.” with “n.o.s.”.

In the entry for “Arsenates, solid, N.O.S., inorganic, *see*”, *replace* “N.O.S.” with “n.o.s.”.

In the entry for “Arsenic sulphides, liquid, N.O.S., inorganic, *see*”, *replace* “N.O.S.” with “n.o.s.”.

In the entry for “Arsenic sulphides, solid, N.O.S., inorganic, *see*”, *replace* “N.O.S.” with “n.o.s.”.

In the entry for “Arsenites, liquid, N.O.S., inorganic, *see*”, *replace* “N.O.S.” with “n.o.s.”.

In the entry for “Arsenites, solid, N.O.S., inorganic, *see*”, *replace* “N.O.S.” with “n.o.s.”.

In the entry for “DICHLOROISOCYANURIC ACID, SALTS”, *replace* “DICHLOROISOCYANURIC ACID, SALTS” with “DICHLOROISOCYANURIC ACID SALTS”.

In the three entries for “FISHMEAL”, *replace* “FISHMEAL” with “FISH MEAL” and *replace* “fishmeal” with “fish meal”.

In the three entries for “FISHSCRAP”, *replace* “FISHSCRAP” with “FISH SCRAP” and *replace* “fishscrap” with “fish scrap”.