

MERCHANT SHIPPING (DANGEROUS GOODS) RULES 1992

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S.I. No. 391 of 1992.

I, MICHAEL WOODS, Minister for the Marine, in exercise of the powers conferred on me by section 38 of the Merchant Shipping (Safety Convention) Act, 1952, (No. 29 of 1952), and the Communications (Transfer of Departmental Administration and Ministerial Functions) Order, 1987 (S.I. No. 91 of 1987), hereby make the following Rules:—

PART I

General

REG 1

1 Citation, interpretation, exemptions and revocation.

1. (1) These Rules may be cited as the Merchant Shipping (Dangerous Goods) Rules, 1992, and shall come into operation on the 14th day of December, 1992.

(2) In these Rules, unless the context otherwise requires:

"Bulk Chemical Code" means the 1985 edition of the IMO Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk;

"correct technical name" means a description of the goods sufficient to identify readily their dangerous characteristics, including any proper shipping name described in the IMDG Code;

"dangerous goods" means goods classified in the IMDG Code or any other IMO publication specified below as dangerous for carriage by sea, and any other substance or goods the properties of which might

be dangerous if that substance or those goods were carried by sea and includes empty receptacles, residues in empty tanks or cargo holds which have been used previously for the carriage of dangerous goods unless such receptacles, empty tanks or cargo holds have been cleaned and dried or ventilated as appropriate, or when the properties of the former contents permit with safety, have been adequately closed, or in the case of radioactive substances have been both cleaned and adequately closed, but the expression shall not include goods forming part of the equipment or stores of the ship in which they are carried;

"dangerous goods declaration" means a certificate or declaration in writing that the shipment offered for carriage is properly marked or labelled in accordance with the provisions of these Rules and is packaged in such a manner as to withstand the ordinary risks of handling and transport by sea, having regard to the properties of the goods to be carried;

"durably marked" means that the label or other marking in accordance with the provisions of these Rules is such as to remain identifiable on packages which have been at least three months in the sea and "durable" shall be construed accordingly;

"employee" means a person (including the master but excluding dock workers or shore-based repair and other workers temporarily employed on board the ship) employed;

(a) in the navigational, engine room, radio, medical or catering department of a ship; or

(b) in the provision of goods, services or entertainment on board;

"flammable liquids" means liquids the flashpoint of which is at or below 60 degrees celsius (closed cup) in respect of bulk cargoes and at or below 61 degrees celsius (closed cup) in respect of packaged goods;

"freight container" means an article of transport equipment (other than a vehicle or packaging) used for the containment of cargo which is:

(a) strong enough for repeated use;

(b) capable of facilitating the transport of goods, by one or more modes of transport, without intermediate reloading; and

(c) capable of being readily handled, and of being secured during carriage, and having fittings for these purposes; and includes any such container carried on a chassis;

"Gas Carrier Code" means the 1983 edition of the IMO code for the Construction and Equipment of Ships Carrying Liquified Gases in Bulk;

"Gas Carrier Code for Existing Ships" means the 1976 edition of the IMO Code for Existing Ships Carrying Liquified Gases in Bulk, including the first set of amendments (adopted by the Maritime Safety Committee of the IMO in April 1978), the second set of amendments (adopted by the Maritime Safety Committee of the IMO in May 1979), the third set of amendments (adopted by the Maritime Safety Committee of the IMO in May 1980) and the fourth set of amendments (adopted by the Maritime Safety Committee of the IMO in November 1984);

"IMO" means the International Maritime Organisation;

"IMDG Code" means the 1990 consolidated edition of the International Maritime Dangerous Goods Code incorporating amendments up to number 25-89;

"in bulk" means directly and without intermediate form of containment in the structural cargo spaces of a ship;

"International Bulk Chemical Code" means the 1983 edition of the IMO International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk;

"International Gas Carrier Code" means the 1983 edition of the IMO International Code for the Construction and Equipment of Ships Carrying Liquefied Gases in Bulk;

"Marine Notice" means a Notice described as such issued by the Department of the Marine and which may be amended or replaced from time to time;

"package" means an individual package or receptacle and includes a freight container or a portable tank or tank container or tank vehicle or other vehicle or other cargo unit containing dangerous goods for shipment and "packaged" shall be construed accordingly;

"the Protocol of 1978" means the Protocol of 1978 relating to the International Convention for the Safety of Life at Sea, 1974:

"safety explosives" means explosives of Class I, Division 1.4 compatibility Group S in the IMDG Code;

"Solid Bulk Cargoes Code" means the 1983 edition of the IMO Code of Safe Practice for Solid Bulk Cargoes, including the 1985 amendments adopted by the Maritime Safety Committee of the IMO in November 1984;

"United Nations number" means the number allocated to dangerous substances or articles by the United Nations Committee of Experts on the Transport of Dangerous Goods as specified in the fourth revised edition of their publication entitled "Recommendations on the Transport of Dangerous Goods" published in 1986 by the United Nations Organisation:

(3) Any reference in these Rules to the Bulk Chemical Code, the Gas Carrier Code for Existing Ships, the Solid Bulk Cargoes Code, the IMDG Code or the United Nations 1986 publication entitled "Recommendations on the Transport of Dangerous Goods" shall include a reference to any document amending that publication which is considered by the Minister to be relevant from time to time and is specified in a Marine Notice.

(4) The Minister may grant exemptions from all or any of the provisions of these Rules (as may be specified in the exemption) for classes of cases on such terms (if any) as he may so specify and may, subject to giving reasonable notice, alter or cancel any such exemption.

(5) The Merchant Shipping (Dangerous Goods) Rules, 1983 (S.I. No. 306 of 1983), are hereby revoked.

REG 2

Application.

2. (1) These Rules apply to:

(a) ships registered in the State;
(b) other ships while they are loading or discharging cargo or embarking or disembarking passengers or bunkering or discharging fuel within the State or the territorial waters thereof.

(2) (a) In the case of a ship to which the Protocol of 1978 and the International Convention for the Safety of Life at Sea, 1974, and its subsequent relevant amendments applies, where all

dangerous goods are being carried or discharged in accordance with the law relating to the carriage by sea of such goods of the country in which the ship is registered and all the provisions of that law (in so far as the same are applicable) have been complied with, the provisions of Parts II, III, IV and V of these Rules shall be deemed to have been complied with in relation to that ship.

(b) In the case of any other ship, the Minister may exempt that ship from any of the requirements of these rules which are required to be complied with in relation to that ship if he is satisfied that the requirements of the law relating to the carriage by sea of dangerous goods of the country in which the ship is registered have been complied with and are not less effective than the requirements of Parts II, III, IV and V of these Rules.

REG 3

General duties of shipowners, employers and masters.

3. (1) It shall be the duty of every shipowner and employer of persons on board a ship and of every master of a ship to ensure, so far as is reasonably practicable, that when any dangerous goods are being handled, stowed or carried on the ship or loaded onto or unloaded from the ship, nothing in the manner in which those goods are carried, stowed, handled, loaded or unloaded as the case may be is such as might create a risk to the health or safety of any person.

(2) Without prejudice to the generality of the shipowner's or employer's or master's duty under paragraph (1) of this rule the matters to which the duty of the shipowner and of the employer extends shall include the following—

(i) the provision and maintenance of ship's equipment for the handling, stowage and transport of dangerous goods which is so far as is reasonably practicable, safe and without risk to health; and

(ii) the provision of such information, instruction, training and supervision as is necessary to ensure, so far as is reasonably practicable, the health and safety aboard ship of employees in connection with the handling, stowage and transport of dangerous goods on the ship.

REG 4

General duties of employees on board ship.

4. It shall be the duty of every employee on board ship:

(a) to take reasonable care for the health and safety of himself and of other persons who may be affected by his acts or omissions in connection with the handling, stowage and transport of dangerous goods on the ship;
and

(b) as regards any duty or requirement imposed on his shipowner, employer or master by the Merchant Shipping Acts, 1894 to 1992, or any regulation or rules made thereunder prior to the date on which these Rules come into operation, with regard to the safety or health of persons on board a ship to which these Rules apply, to co-operate with the shipowner, employer or master, so far as is necessary, to enable the duty or requirement to be performed or

complied with in connection with the handling, stowage and transport of dangerous goods on the ship.

REG 5

Misconduct endangering the ship or persons on board ship.

5. In connection with the handling, stowage and transport of dangerous goods on the ship, no person shall intentionally or recklessly interfere with or misuse anything provided on a ship in the interests of health, safety or welfare in pursuance of the Merchant Shipping Acts, 1894 to 1992, or any regulation or rule made thereunder prior to the coming into operation of these Rules.

REG 6

Onus of proving what is reasonably practicable.

6. In any proceedings for an offence under this Part of these Rules consisting of a failure to comply with a duty or requirement to do something so far as is reasonably practicable, it shall be for the accused to prove that it was not reasonably practicable to do more than was in fact done to satisfy the relevant duty or requirement.

PART II

Packaged Goods

REG 7

Documentation of packaged dangerous goods.

7. (1) No packaged dangerous goods shall be taken on board any ship to which these Rules apply for carriage in that ship unless the shipper of the goods has furnished the shipowner or master of the ship with a dangerous goods declaration.

(2) Such declaration shall indicate with the correct technical name, the identity of the goods and the United Nations number (whenever such a number exists) and shall indicate to which of the following classes the goods belong:

Class 1 Explosives. Class 2 Gases compressed, liquified or dissolved under pressure, subdivided into three categories:

2.1 flammable gases;

2.2 non-flammable gases, being compressed, liquified or dissolved, but neither flammable nor poisonous;

2.3 poisonous gases. Class 3 Flammable liquids, subdivided into three categories:

3.1 low flashpoint group of liquids having a flashpoint below —18 degrees celsius (0 degrees fahrenheit), closed cup test;

3.2 intermediate flashpoint group of liquids having a flashpoint of - 18 degrees celsius (0 degrees Fahrenheit) up to, but not including, 23 degrees celsius (73 degrees fahrenheit), closed cup test;

3.3 high flashpoint group of liquids having a flashpoint of 23 degrees celsius (73 degrees fahrenheit) up to and including 61 degrees celsius (141 degrees fahrenheit), closed cup test. Class 4.1

Flammable solids. Class 4.2 Substances liable to spontaneous combustion. Class 4.3 Substances which in contact with water emit flammable gases. Class 5.1 Oxidising substances (agents). Class 5.2 Organic Peroxides. Class 6.1 Poisonous (toxic) substances. Class 6.2 Infectious substances. Class 7 Radioactive substances. Class 8 Corrosives. Class 9 Miscellaneous dangerous substances which present a danger not covered by other classes.

(3) The shipper shall in addition provide the shipowner or master of the ship with the following information in writing where appropriate:

- (i) the number and type of packages;
- (ii) the total quantity of dangerous goods covered by the declaration (gross weight);
- (iii) net weight of explosive content of Class 1 dangerous goods (other than safety explosives);
- (iv) the closed cup flashpoint if 61 degrees celsius or below.

(4) (a) Where the dangerous goods have been packed into a freight container or vehicle, the person or persons responsible for packaging of the dangerous goods therein shall furnish the shipowner or master of the ship with a packing certificate signed by him indicating that the container has been packed by him or with a vehicle packing declaration.

(b) A packing certificate or vehicle packing declaration shall state that the cargo in the unit, where Rule 8 of these Rules is applicable, has been properly packaged and has been securely packed and adequately braced as necessary in the freight container or vehicle for the intended voyage; the packing certificate or vehicle packing declaration shall also indicate that:—

- (i) the freight container or vehicle was clean, dry and appeared fit to receive the goods;
- (ii) no incompatible substances have been packed within the freight container or vehicle except where this is permitted by these Rules;
- (iii) where packages or receptacles have been packed into the freight container or vehicle, that they are in a sound condition;
- (iv) labelling or appropriate marking on the packages and freight container or vehicles complies with Rule 9 of these Rules.

(c) Where there is due cause to suspect that a freight container or road vehicle in which dangerous goods are packed is not in compliance with the foregoing provisions of these Rules, or where a container packing certificate or vehicle packing declaration is not available, the freight container or vehicle shall not be accepted for shipment.

(5) The master of a ship carrying packaged dangerous goods shall cause a specific list, manifest or stowage plan to be carried in the ship, setting forth, in accordance with the information provided under the foregoing provisions of this Rule, details of the dangerous goods carried in the ship on the voyage on which she is currently engaged (including the correct technical name of the goods, their classification in the IMDG Code, and their weight or quantity); such details shall be obtained from the shipping documents prepared by the shipper.

(6) The master shall cause details of the location in the ship where goods are stowed to be recorded and shall cause to be carried in the ship any additional special documents required for the acceptance of dangerous goods for carriage.

(7) All documents referred to in this Rule shall be available on board the ship carrying those dangerous goods and the master of a ship shall ensure that a copy of one of these documents shall be made available before departure to the harbour master of the port or his nominee.

REG 8

Packaging.

8. (1) Packaged dangerous goods shall not be taken on board any ship to which these Rules apply for carriage in that ship if the owner of the ship or any of his servants or agents knows or ought to know that the goods are not packed in such a manner as to withstand the ordinary risks of handling and transport by sea, having regard to the properties of the goods.

(2) Subject to the provisions of paragraph (3) of this Rule:

(a) the packaging of dangerous goods, being goods which are not loaded in bulk, shall be:

(i) well made and in good condition;

(ii) of such a character that any interior surface with which the contents may come into contact is not dangerously affected by the substances being conveyed and does not react dangerously with it; and

(iii) if the dangerous goods are radioactive substances, adequate to allow a margin of safety, sufficient in the circumstances, to protect all persons on board the ship;

(b) Where absorbent or cushioning material is used in the packaging of a receptacle or receptacles containing liquids, that material shall be:

(i) capable of minimising the dangers to which the liquid gives rise;

(ii) so disposed as to prevent movement of the receptacle and ensure that the receptacle remains surrounded by such material.

(c) Where absorbent material is used it shall be in sufficient quantity where reasonably possible to absorb the liquid in the event of breakage of the receptacle.

(d) Receptacles containing dangerous liquids shall have an ullage at the filling temperature sufficient to allow for the highest temperature likely to be met during the course of normal carriage.

(e) Cylinders or receptacles for gases under pressure shall be adequately constructed, tested, maintained and correctly filled.

(3) Where the goods:

(a) have been packaged in accordance with the requirements of the IMDG Code; or

(b) are contained in a portable tank or road tank vehicle which is certified for such carriage under Section 13 of the IMDG Code; paragraphs (1) and (2) of this Rule shall be deemed to have been complied with.

(4) Before the goods are taken on board the ship the shipowner or master shall be furnished with a dangerous goods declaration by the shipper that the goods are packaged in accordance with the requirements of this Rule.

REG 9

Marking.

9. Dangerous goods which are contained in a package shall not be taken on board a ship to which these Rules apply for carriage in that ship unless the following conditions are satisfied;

- (a) the package shall be clearly marked with the correct technical name of the goods and an indication of the nature of the danger to which the goods give rise; for the avoidance of doubt trade names shall not be used;
- (b) where the goods are to be taken on board within the State or the territorial waters thereof, the above markings shall comply with the IMDG Code;
- (c) where the outer material of the package is such that it will survive at least three months' immersion in the sea, the markings shall be durable;
- (d) where the outer material of the package is such that it will not survive at least three months' immersion in the sea, any inner receptacles which will survive such immersion shall be durably marked with an indication of the nature of the danger to which the goods give rise, which indication may be given by any suitable means including (but not restricted to) an IMDG Code Class symbol of an appropriate size;
- (e) without prejudice to the above requirements, where the goods are contained in a freight container, vehicle, portable tank or tank container, the unit in which the goods are contained shall bear conspicuously on its exterior distinctive labels or other appropriate marking indicating the nature of the danger to which the goods give rise. Where the vehicle is a road tank vehicle, or the goods are contained in a portable tank or tank container, the label or marking shall in addition indicate the correct technical name of the goods;
- (f) where any road tank vehicle, tank container or portable tank of the kind described in sub-paragraph (e) of this paragraph containing such goods is to be taken on board within the State or the territorial waters thereof:
 - (i) the label or marking shall be that specified in the IMDG Code class label or other marking required by the IMDG Code; and
 - (ii) the label or marking shall be placed in accordance with the requirements of the IMDG Code or in the absence of such requirements on each side and at each end of the container or tank or on each side and at the rear of the vehicle.

PART III

Stowage and Carriage

REG 10

Stowage and packing.

10. (1) Dangerous goods taken on board any ship to which these Rules apply for carriage in that ship shall be stowed in that ship in a manner which is a safe and proper manner of stowage for the goods having regard to their identity and dangerous properties, indicated (in the case of packaged goods) by the markings referred to in Rule 9 of these Rules.

(2) In the case of goods packed in a freight container or vehicle, the goods shall be packed in the container or vehicle in a manner which is a safe and proper manner of packaging for the goods, having regard to their identity and dangerous properties, indicated by the markings referred to in Rule 9 of these Rules.

(3) Packaged dangerous goods which give off dangerous vapours shall be stowed in a mechanically ventilated space or on deck.

(4) Dangerous goods in solid form in bulk which give off dangerous vapours shall be stowed in a well ventilated space.

(5) Dangerous goods of different kinds which the shipowner or any of his servants or agents knows or ought to know are liable to interact dangerously in the quantities carried shall be effectively segregated from one another.

(6) In any proceedings against an owner or master in respect of a failure to comply with the provisions of this Rule it shall be a good defence to prove:

(a) that the goods were stowed in accordance with the provisions of the IMDG Code, or

(b) in respect of a failure to comply with paragraph (2), that before the freight container or vehicle was taken on board the ship the person responsible for packing the goods into the container or vehicle had furnished the shipowner or master of the ship with a packing certificate signed by him or with a vehicle packing declaration indicating that the goods had been properly packed in the container or vehicle, or

(c) in the case of solid goods in bulk, that the goods were stowed in accordance with the recommendations of the Solid Bulk Cargoes Code.

REG 11

Carriage of explosives other than safety explosives.

11. No explosives (other than safety explosives) which the owner of the ship or any of his servants or agents knows or ought to know present a serious risk when carried in a ship shall be taken on board any ship to which these Rules apply unless:

(a) such explosives are stowed in a compartment in which any electrical apparatus and cables are so designed and used as to minimise the risk of fire or explosion; and

(b) where Category II stowage is required by the IMDG Code such explosives are stowed in a magazine which shall be kept securely closed while the ship is at sea; and

(c) detonators are effectively segregated from all other explosives.

REG 12

Carriage of dangerous goods on passenger ships.

12. (1) No explosives shall be taken on board or carried in any ship to which these Rules apply which is carrying more than 12 passengers except:

explosives in division 1.4, compatibility group S may be carried in any amount in passenger ships. No other explosives may be carried except any one of the following:

.1 explosive articles for life-saving purposes, if the total net explosives mass of such articles does not exceed 50 kilogrammes per ship; or

.2 explosives in compatibility groups C, D and E, if the total net explosives mass does not exceed 10 kilogrammes per ship; or

.3 explosive articles in compatibility group G other than those requiring special stowage, if the total net explosives mass does not exceed 10 kilogrammes per ship; or

.4 explosive articles in compatibility group B, if the total net explosives mass does not exceed 5 kilogrammes per ship.

(2) Any distress signals, rockets or fireworks of a kind covered in paragraph (1) above carried in any ship shall be stowed under the supervision of a person appointed for that purpose by the shipowner or master of the ship.

(3) No dangerous goods shall be taken on board or carried in any ship to which these Rules apply which is carrying more than 25 passengers, or more than one passenger per three metres of overall length, whichever is the greater number, if those goods are classified in the IMDG Code for on deck stowage only and such stowage cannot be provided.

(4) Notwithstanding the provisions of paragraph 1, additional quantities or types of explosives may be carried in passenger ships in which special safety measures approved by the Minister are taken.

(5) When an incident takes place involving the loss or likely loss overboard of packaged dangerous goods into the sea, the master, or other person having charge of the ship, shall report the particulars of such an incident without delay and to the fullest extent possible to the nearest coastal State. The report shall be based on the guidelines and general principles adopted by the IMO and as set out in Marine Notice No. 25 of 1992 and any subsequent amendments to same.

(6) In the event of the ship referred to in paragraph 5 being abandoned, or in the event of a report from such a ship being incomplete or unobtainable, the owner, charterer, manager or operator of the ship or their agents shall, to the fullest extent possible, assume the obligations placed upon the master by this Rule.

PART IV

Carriage in bulk

REG 13

13. (1) Dangerous goods shall not be loaded in bulk into any ship to which these Rules apply for carriage in that ship if the owner of the ship or any of his servants or agents knows or ought to know that the goods cannot safely be carried in bulk to the destination to which they are consigned;

(2) In any proceedings against an owner or master in respect of a failure to comply with the provisions of this Rule, it shall be a good defence to prove:

(a) that he did not know that the goods could not be safely carried as required by paragraph (1); and

(b) (i) where the dangerous goods in question are goods listed in Chapter VI of the Bulk Chemical Code, or in Chapter 17 of the International Bulk Chemical Code, or in Chapter XIX of the Gas Carrier Code, or in Chapter 19 of the International Gas Carrier Code for Existing Ships, or in Chapter 19 of the International Gas Carrier Code, or are classified dangerous goods listed in Appendix B of the Solid Bulk Cargoes Code, that they were loaded in accordance with the recommendations of whichever of those Codes was appropriate; or

(ii) where the dangerous goods in question consist of a liquid chemical or a liquified gas which is not listed in the codes mentioned in sub-paragraph (i), that they were loaded in accordance with conditions specified by the Minister.

PART V

Documentation of dangerous goods loaded in bulk

REG 14

14. (1) The shipper shall furnish the shipowner or master of any ship to which these Rules apply with a notification in writing giving notice of the nature of any dangerous goods to be carried in bulk indicating the flashpoint of those liquids with a flashpoint at or below 60 degrees celsius (closed cup). Such notification shall specify the correct technical name of the goods, the United Nations number (if any) and, for dangerous goods carried in solid form in bulk, the class listed in rule 7 (2) to which the goods belong.

(2) The master of a ship carrying dangerous goods in solid form in bulk listed in Appendix B to the Solid Bulk Cargoes Code shall cause a specific list, manifest or detailed stowage plan to be carried in the ship setting forth details of the dangerous goods carried in the ship on the voyage on which she is currently engaged (including the correct technical name of the goods, their classification in accordance with Rule 7 (2) of these Rules and their weight or quantity); such details shall be obtained from the shipping documents prepared by the shipper. Additionally the master

shall cause details of the location in the ship where the goods are stowed to be recorded. He shall also cause to be carried in the ship any additional special documents required for the acceptance of dangerous goods for carriage. Such list, manifest or stowage plan and additional special documents referred to in this paragraph shall be available on board the ship carrying those dangerous goods.

GIVEN under my Official Seal this 11th day of December, 1992.

MICHAEL WOODS,
Minister for the Marine.

EXPLANATORY NOTE.

These Rules revoke the Merchant Shipping (Dangerous Goods) Rules, 1983 (S.I. No. 306 of 1983) while re-enacting and extending the Rules to give effect to the additional requirements applying to:

- (i) dangerous goods carried in solid form in bulk;
- (ii) explosives for distress signals, rockets and fireworks;
- (iii) reporting of incidents involving the loss or likely loss of dangerous goods.

The Rules give effect to Part A of Chapter VII of the International Convention for the Safety of Life at Sea, 1974, as set out in (a) the Second (1983) Amendments to that Convention adopted by the International Maritime Organisation on 17th June, 1983 (b) Amendments to that Convention adopted by the International Maritime Convention 11 April, 1989 and (c) Amendments to that Convention adopted by the International Maritime Organisation on 23 May, 1991.