STATUTORY INSTRUMENTS.

S.I. No. 488 of 2023

MERCHANT SHIPPING (DANGEROUS GOODS) RULES 2023
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S.I. No. 488 of 2023

MERCHANT SHIPPING (DANGEROUS GOODS) RULES 2023

I, JACK CHAMBERS, Minister of State at the Department of Transport, 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 Maritime Transport, Safety and Security (Transfer of Departmental Administration and Ministerial Functions) Order 2005 (S.I. No. 842 of 2005) (as adapted by the Transport, Tourism and Sport (Alteration of Name of Department and Title of Minister) Order 2020 (S.I. No. 351 of 2020)) and the Transport (Delegation of Ministerial Functions) Order 2023 (S.I. No. 211 of 2023), hereby make the following rules:

PART 1
General

Citation

1. These Rules may be cited as the Merchant Shipping (Dangerous Goods) Rules 2023.

Interpretation

2. (1) In these Rules —

“Bulk Chemical Code” means the IMO Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk adopted by the Maritime Safety Committee of the IMO by Resolution MSC.9(53) on 17 September 1986, in its updated version;

“cargo transport unit” means a road transport tank or freight vehicle, a railway transport tank or freight wagon, a multimodal freight container or portable tank, or multi-element gas container;

“crew” means all persons employed or engaged in any capacity on board a ship on the business of that ship but does not include dock workers or shore-based repair and other workers temporarily employed on board the ship;

“dangerous goods” means the substances, materials and articles covered by the IMDG Code;

“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;

“dangerous goods in solid bulk form” means any material, other than liquid or gas, consisting of a combination of particles, granules or any larger pieces of material, generally uniform in composition, which is covered by the IMDG

Notice of the making of this Statutory Instrument was published in "Iris Oifigiúil" of 10th October, 2023.
Code and is loaded directly into the cargo spaces of a ship without any intermediate form of containment, and includes such materials loaded in a barge on a barge-carrying ship;

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

“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;

“flammable liquids” means liquids, or mixtures of liquids, or liquids containing solids in solution or suspension (such as paints, varnishes, lacquers, but not including substances which, on account of their other dangerous characteristics, have been included in other classes) which give off a flammable vapour at or below 60°C closed-cup test (corresponding to 65.6°C open-cup test), normally referred to as the “flashpoint”. This also includes:

(a) liquids offered for transport at temperatures at or above their flashpoint, and
(b) substances, which give off a flammable vapour at temperatures equal to or below the maximum transport temperature;

“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;

“GC Code” means the IMO Code for the Construction and Equipment of Ships Carrying Liquified Gases in bulk, adopted by IMO Assembly Resolution A.328(IX) on 12 November 1975, in its updated version;


“IGC Code” means the International Code for the Construction and Equipment of Ships Carrying Liquified Gases in Bulk adopted by the Maritime Safety Committee of the IMO by Resolution MSC.370(93) on 22 May 2014, in its updated version;


“IMO” means the International Maritime Organisation;
“IMSBC Code” means the International Maritime Solid Bulk Cargoes Code adopted by the Maritime Safety Committee of the IMO by Resolution MSC.268(85) on 4 December 2008, in its updated version;

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


“Marine Notice” means a Notice described as such issued by the Department of Transport;

“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;

“proper shipping name” means the standard technical name to describe the hazard properties and the composition of dangerous goods as set out in the dangerous goods list in the IMDG Code;


“UN 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 twenty first revised edition of their publication entitled “Recommendations on the Transport of Dangerous Goods Volumes I and II” published in 2019 by the United Nations Organisation;

(2) Any reference in these Rules to the Bulk Chemical Code, the IBC Code, the GC Code, the IMSBC Code, the IMDG Code, IGC Code, INF Code or the twenty first revised edition of the United Nations 2019 publication entitled “Recommendations on the Transport of Dangerous Goods Volumes I and II” 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.

Exemptions

3. 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 or she may so specify and may, subject to giving reasonable notice, alter or cancel any such exemption. An exemption shall be published in a Marine Notice.

Revocation

Application

5. (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) In the case of—
   (a) 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 requirements of Parts 3, 4 and 5 shall be deemed to have been complied with in relation to that ship, and
   (b) 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 3, 4 and 5.

PART 2

General duties of shipowners, employers, masters and crew

General duties of shipowners, employers and masters

6. (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, employer's or master's duty under paragraph (1), the matters to which the duty of the shipowner and of the employer extends shall include the following—
   (a) 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
   (b) 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 the crew in connection with the handling, stowage and transport of dangerous goods on the ship.

**General duties of crew on board ship**

7. It shall be the duty of every member of the crew on board a ship:

(a) to take reasonable care for the health and safety of himself or herself and of other persons who may be affected by his or her 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 the shipowner, employer or master by the Merchant Shipping Acts 1894 to 2022, or any regulation or rules made thereunder prior to the making of these Rules, with regard to the safety or health of persons on board a ship to which these Rules apply, to cooperate 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.

**Misconduct endangering ship or persons on board ship**

8. 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 2022, or any regulation or rule made thereunder prior to the making of these Rules.

**PART 3**

**Packaged goods**

**Documentation of packaged dangerous goods**

9. (1) Packaged dangerous goods shall not 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 in accordance with Chapter 5 of the IMDG Code.

(2) Such declaration shall indicate the proper shipping name, the identity of the goods and the UN number and shall indicate to which of the following classes the goods belong:

<table>
<thead>
<tr>
<th>Class 1</th>
<th>Explosives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class 2</td>
<td>Gases subdivided into three categories:</td>
</tr>
<tr>
<td></td>
<td>2.1 flammable gases;</td>
</tr>
</tbody>
</table>
2.2 non-flammable, non-toxic gases, which are asphyxiating, oxidising or do not come under the other classes;
2.3 toxic gases

<table>
<thead>
<tr>
<th>Class</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>Flammable liquids and Liquid desensitised explosives</td>
</tr>
<tr>
<td>4</td>
<td>Flammable solids</td>
</tr>
<tr>
<td></td>
<td>4.1 Flammable solids</td>
</tr>
<tr>
<td></td>
<td>4.2 Substances liable to spontaneous combustion</td>
</tr>
<tr>
<td></td>
<td>4.3 Substances which in contact with water emit flammable gases</td>
</tr>
<tr>
<td>5</td>
<td>Oxidising substances (agents) and Organic Peroxides</td>
</tr>
<tr>
<td>6</td>
<td>Toxic and infectious substances</td>
</tr>
<tr>
<td>7</td>
<td>Radioactive material</td>
</tr>
<tr>
<td>8</td>
<td>Corrosive substances</td>
</tr>
<tr>
<td>9</td>
<td>Miscellaneous dangerous substances and articles (Class 9) and environmentally hazardous substances</td>
</tr>
</tbody>
</table>

(3) Marine pollutants as defined in Chapter 2.10 of the IMDG Code shall be classified in accordance with Chapter 2.9.3 of that Code.

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

   (a) the number and type of packages;
   
   (b) the total quantity of dangerous goods covered by the declaration (gross weight);
   
   (c) net weight of explosive content of Class 1 dangerous goods (other than Division 1.4S explosives); and
   
   (d) the closed cup flashpoint if 60°C or below.

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

(6) A packing certificate or vehicle packing declaration shall state that the cargo in the unit, where Rule 10 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–

   (a) the freight container or vehicle was clean, dry and appeared fit to receive the goods,
(b) no incompatible substances have been packed within the freight container or vehicle except where this is permitted by these Rules,

(c) where packages or receptacles have been packed into the freight container or vehicle, that they are in a sound condition, and

(d) labelling or appropriate marking on the packages and freight container or vehicles complies with Rule 11.

(7) 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 this Rule, or where a container packing certificate or vehicle packing declaration is not available, the freight container or vehicle shall not be accepted for shipment.

(8) 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 proper shipping 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.

(9) 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.

(10) The master shall ensure that all cargo, cargo units and cargo transport units are loaded, stowed and secured on the ship for the duration of the voyage in accordance with the approved Cargo Securing Manual for that ship.

(11) 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 or her nominee.

(12) Appropriate information shall be immediately available at all times for use in emergency response to accidents and incidents and should be stored away from packages containing dangerous goods. Such information may be entered into the special list, manifest or dangerous goods transport document or by way of a separate document such as a data sheet once easily retrievable in emergency situations.

Packaging

10. (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) The packaging of dangerous goods shall be in accordance with Chapter 4 of the IMDG Code and the packaging shall be:

(a) well-made and in good condition,
(b) of such 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,
(c) strong enough to withstand the shocks and loadings normally encountered during transport,
(d) constructed and closed so as to prevent any loss of contents when prepared for transport which may be caused under normal conditions of transport, by vibration, or by changes in temperature, humidity or pressure,
(e) in accordance with the information provided by the manufacturer,
(f) free from dangerous residue on the outside of the packages, and
(g) 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.

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

(a) capable of minimising the dangers to which the liquid gives rise,
(b) so disposed as to prevent movement of the receptacle and ensure that the receptacle remains surrounded by such material, and
(c) in the case of absorbent material, of sufficient quantity where reasonably possible to absorb the liquid in the event of breakage of the receptacle.

(4) 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.

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

(6) Before any packaged dangerous goods are taken on board a 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.
Marking

11. 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 proper shipping name of the goods and an indication of the nature of the danger to which the goods give rise; 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 proper shipping name of the goods;

(f) where any road tank vehicle, tank container or portable tank of the kind described in subparagraph (e) 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 4
Stowage and carriage

Stowage and packaging

12. (1) The carriage of dangerous goods in packaged form shall be in compliance with the IMDG Code.

(2) The carriage of irradiated nuclear fuel, plutonium and high-level radioactive wastes carried as cargo in accordance with Class 7 of the IMDG Code shall be in compliance with the IMDG Code and the INF Code.

(3) 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 11.

(4) 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 11.

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

(6) Dangerous goods in solid form in bulk:
    (a) shall be loaded and stowed safely and appropriately in accordance with the nature of the goods with incompatible goods segregated from one another;
    (b) which are liable to spontaneous heating or combustion, shall not be carried unless adequate precautions have been taken to minimise the likelihood of the outbreak of fire;
    (c) which give off dangerous vapours, shall be stowed in a well-ventilated space.

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

Carriage of explosives other than Division 1.4S explosives

13. (1) Explosives, which the owner of the ship or any of his or her servants or agents knows or ought to know present a serious risk when carried in a ship, shall not 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;
(b) where Category 02 stowage is required by the IMDG Code, such explosives are stowed securely in order to prevent unauthorised access, provided that in the case of an emergency, access can be gained without delay; and

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

(2) This Rule does not apply to Division 1.4S explosives.

Carriage of dangerous goods on passenger ships

14. (1) Explosives shall not be taken on board or carried in any ship to which these Rules apply which is carrying more than 12 passengers, except Division 1.4S explosives, which may be carried in any amount in passenger ships as provided for in Chapter 7.1 of the IMDG Code. No other explosives may be carried on passenger ships except:

(a) explosives in compatibility groups C, D and E, if the total net explosive mass does not exceed 10 kilogrammes per ship and if they are transported in closed cargo transport units on deck or under deck,

(b) explosive articles in compatibility group G, if the total net explosive mass does not exceed 10 kilogrammes per ship and if they are transported in closed cargo transport units on deck or under deck, or

(c) explosive articles in compatibility group B, if the total net explosive mass does not exceed 10 kilogrammes per ship and if they are transported on deck only in closed cargo transport units.

(2) Any distress signals, rockets or fireworks of a kind covered in paragraph (1) 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) Dangerous goods shall not 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 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 dangerous goods in any form 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 and relevant flag state. The report shall be based on the guidelines and general principles adopted by the IMO as set out in IMO Resolution A.851(20) 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 5
Carriage in bulk

Requirements for carriage of dangerous goods in bulk

15. (1) The carriage of dangerous goods in solid form in bulk shall be in
compliance with the IMSBC Code and the IMDG Code.

(2) The carriage of bulk cargoes of dangerous chemicals or noxious liquid
substances, other than petroleum, shall be in compliance with the IBC Code.

(3) The carriage of liquified gases in bulk shall be in compliance with the
IGC Code.

(4) 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
or her 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.

Notification and documentation of dangerous goods carried in bulk

16. (1) A 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°C (closed cup). Such notification
shall specify the proper shipping name of the goods, the UN number and, for
dangerous goods carried in solid form in bulk, the Class listed in Rule 9(2) to
which the goods belong.

(2) The master of a ship carrying dangerous goods in solid form in bulk
listed in Appendix 4 to the IMSBC 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 proper shipping name of the goods, their classification
in accordance with Rule 9(2) 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 or she 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 and the master of a ship shall ensure that a
copy of each one of these documents shall be made available before departure
to the harbour master of the port or his or her nominee.
GIVEN under my hand,
9 October 2023

JACK CHAMBERS,
Minister of State at the Department of Transport
EXPLANATORY NOTE

(This note is not part of the Instrument and does not purport to be a legal interpretation.)

These Rules give effect to Chapter VII of the Convention for the Safety of Life at Sea and provide for the carriage and stowage of dangerous goods and the general duties of the shipowner, master and crew aboard the ship. They further provide for requirements to ensure cargo is appropriately secured, that all relevant documentation is maintained on board the ship and is readily available in case of emergencies and reporting requirements for the loss of dangerous goods. Provisions in relation to the carriage of dangerous goods in solid form in bulk are also set out along with requirements for certain explosives. These Rules revoke the Merchant Shipping (Dangerous Goods) Rules 1992 (S.I. No. 391 of 1992).