Regulations of 21 May 1987 No. 406 concerning carriage by ship of special or dangerous cargoes in bulk or as packaged goods


Chapter I
General provisions

§ 1-1 Scope of application

(1) These Regulations shall apply to Norwegian ships, unless expressly provided otherwise.
(2) These Regulations shall apply to new and existing ships, with the exception of cargo ships, barges and lighters, as indicated in the separate chapters and sections (§§).
(3) Ships which deviate from normal types of ship, where the provisions in these regulations cannot be fully complied with, shall meet the requirements imposed by the Norwegian Maritime Directorate in each individual case.
(4) For cargo ships, barges and lighters the Regulation of 1 July 2006 concerning the carriage of dangerous cargoes on cargo ships and the Regulation of 1 July 2006 concerning the carriage of cargoes on cargo ships shall apply.

Amended by Regulations of 29 June 2006 No. 787 (in force on 1 July 2006) and 29 June 2007 No. 1006 (in force on 1 July 2007).

§ 1-2 Duties

The company, master and other persons working on board shall perform their duties in accordance with the Ship Safety and Security Act and the supplementary provisions laid down in this Regulation.

Amended by Regulation of 29 June 2007 No. 1006 (in force on 1 July 2007).

§ 1-3 Definitions

(1) For the purpose of these regulations, the following definitions shall apply:
   a) Accepted: Equipment accepted by the Norwegian Maritime Directorate on the background of approval or type-approval of the equipment by:
      1. an approved survey organization,
      2. a Notified Body,
      3. another public/private institution specified by name, or
      4. the administration in a country which has ratified the SOLAS Convention.
   b) Service spaces: Spaces outside the cargo tank area used as galleys, pantries containing a cooking appliance, locker rooms and storerooms, workshops other than those forming part of the machinery spaces, and similar spaces and trunks to such spaces.
   c) Gross tonnage: The number entered as gross tonnage in the Tonnage Certificate. If safety tonnage is entered in the remarks column of the Tonnage Certificate, this tonnage shall be used as gross tonnage.
   d) Container: An article of transport equipment
      1. of a permanent character and accordingly strong enough to be suitable for repeated use; and
      2. specially designed to facilitate the transport of goods, by one or more modes of transport, without intermediate reloading.
   e) Container distance: A distance of at least 6.10 metres fore and aft and at least 2.40 metres athwartships. The distance may be used to place a neutral container or containers.
Public spaces: The parts of the accommodation used as halls, dining rooms, lounges and similar permanently enclosed spaces.

Flash point: The flash point of a flammable liquid is the lowest temperature in degrees Celsius at which its vapour forms an ignitable mixture with air.

Approved survey organization: Unless otherwise prescribed in these regulations, the following survey organizations are approved:
1. American Bureau of Shipping
2. Bureau Veritas
3. Det Norske Veritas
4. Germanischer Lloyd
5. Lloyd’s Register of Shipping

Approved:
1. In respect of equipment covered by the Regulations of 29 December 1998 No. 1455 concerning marine equipment: Type-approved by a Notified Body and marked in accordance with the said Regulations.
2. In respect of other equipment: Approved or accepted by the Norwegian Maritime Directorate.
3. In respect of drawings: Approved by the Norwegian Maritime Directorate.

Control station: Space in which the ship’s radio, main navigational equipment or the emergency source of power is located, or where fire-recording equipment is centralized. This does not include special fire-recording equipment which can be suitably located on the cargo tank deck.

Short international voyage: See § 14 of the Regulations of 4 November 1981 No. 3793 concerning trade areas.

Cargo service spaces: Spaces within the cargo tank area which are used for workshops or lockers, including storerooms of more than 2 m² in area which can be used for cargo-handling equipment.

Cargo control room: A space used in the control of cargo-handling operations.

Small coasting: See § 9 of the Regulations of 4 November 1981 No. 3793 concerning trade areas.

Closed container: A container which totally encloses the contents by permanent walls.


Mile: Nautical mile.

INF Code: International Code for the Safe Carriage of Packaged Irradiated Nuclear Fuel, Plutonium and High-Level Radioactive Wastes on Board Ships, adopted by the International Maritime Organization by resolution MSC.88(71), as may be amended by the Organization.

Organization: International Maritime Organization (IMO).

Ro-ro ship: A ship which has one or more decks, either closed or open, but normally not subdivided and generally running the entire length of the ship, in which goods can normally be loaded and unloaded in a horizontal direction.

Accommodation spaces: Spaces used as public rooms, corridors, lavatories, cabins, offices, crew rooms, hospitals, cinemas, games and hobbies rooms, hairdressers, pantries containing no cooking appliance and similar spaces.


Cargo tank deck: That part of the ship that contains cargo tanks, slop tanks, cargo pump room incl. pump room, cofferdams, ballast tanks or void spaces in connection with the cargo tanks and including air spaces in entire length and breadth of the part of the ship above these areas. Tanks located outside cargo spaces, cofferdams, ballast tanks or void spaces aft of the end of the aftermost cargo space or forward of the forwardmost cargo space shall not be included in the cargo tank area.

Type-approved:
1. In respect of equipment covered by the Regulations of 29 December 1998 No. 1455 concerning marine equipment: Type-approved by a Notified Body and marked in accordance with the said Regulations.
2. In respect of other equipment: Approved or accepted by the Norwegian Maritime Directorate.

Open container: A container that is not closed.

(2) In other respects, the definitions contained in the SOLAS Convention shall apply.

(3) «Administration» as used in the SOLAS Convention means the Norwegian Maritime Directorate.

Amended by Regulations of 4 October 2002 No. 1120, 1 June 2004 No. 808 and 29 June 2007 No 1006 (in force on 1 July 2007).


§ 1-4

Type-approval of equipment

Equipment covered by the Regulations of 29 December 1998 No. 1455 concerning marine equipment shall be type-approved by a Notified Body and marked in accordance with the said Regulations.
Chapter II
Ships carrying liquid chemicals in bulk

§ 2-1
Scope of application

(1) The provisions of this chapter shall apply to chemical tankers, irrespective of size, on national and international voyages.
(2) New ships shall comply with the provisions of Chapter VII, part B, of the SOLAS Convention and the provisions of the IBC Code.
(3) Existing ships shall observe the recommendations in the BCH Code as requirements.
(4) Existing chemical tankers which undergo major repairs, alterations or modifications shall comply with the provisions for new ships.
(5) For any ship converted to a chemical tanker, the date of the commencement of the conversion shall determine whether the ship shall comply with the provisions for new or for existing chemical tankers.

§ 2-2
 Definitions

(1) For the purpose of this chapter, the following definitions shall apply:
   a) BCH Code: Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk, adopted by the Maritime Safety Committee by resolution A.212(VII), as may be amended by the Organization.
   b) Existing ship: A ship that is not a new ship. A ship purchased from abroad is considered equivalent to an existing ship.
   c) Liquid chemicals: Cargoes with an absolute vapour pressure not exceeding 2.8 bar at 37.8 degrees C.
   d) IBC Code: International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk, adopted by the Maritime Safety Committee by resolution MSC.4(48), as may be amended by the Organization.
   e) Chemical tanker: A ship that is constructed or arranged and used for the carriage in bulk of any liquid product listed in chapter 17 of the International Chemical Code, the IBC Code or Chapter VI of the BCH Code.
   f) MARPOL 73/78 – Annex II: Regulations for the Control of Pollution by Noxious Liquid Substances in Bulk. Reference is also made in this connection to the Norwegian Maritime Directorate’s Regulations of 2 April 1987 No. 230 concerning the prevention of pollution by noxious liquid substances carried in bulk.
   g) New ship: A ship the keel of which was laid or which had reached a similar stage of construction on or after 1 July 1986.
   h) «A similar stage of construction» means the stage of construction where:
      1. the construction of a specific ship can be established as started; and
      2. the parts of the ship that have been put together comprise at least 50 tons or constitute 1% of the calculated weight of the building material, if this is less.
(2) In other respects the definitions contained in the IBC and BCH Codes shall apply.

§ 2-3
Survey and issue of a certificate

(1) Before a ship is put into service in the carriage of liquid chemicals in bulk it shall be surveyed. The ship shall subsequently be surveyed in accordance with the provisions of the SOLAS Convention.
(2) In the case of ships that are classed in a recognized survey organization, the survey organization shall issue a written statement to the Norwegian Maritime Directorate to the effect that the ship satisfies respectively the regulations of the IBC Code or the BCH Code with regard to the carriage of liquid chemicals.
(3) The survey organization shall provide the Norwegian Maritime Directorate with a list of the cargoes which the ship is approved to carry.
(4) Ships which are not classed in a recognized survey organization shall be approved by the Norwegian Maritime Directorate.
(5) When a ship has been found to comply with the provisions in this chapter, either an International Certificate for the carriage of dangerous chemicals in bulk (IBC Certificate) or a certificate for the transport in bulk of dangerous chemicals (BCH Certificate) is issued, as appropriate. Ships which are not chemical carriers shall have an International Certificate for prevention of pollution during transport of noxious liquid substances in bulk (NLS Certificate). The certificates are issued by the Norwegian Maritime Directorate.
In addition to the drawings required to be submitted pursuant to other regulations, one copy of the following drawings shall be sent to the Norwegian Maritime Directorate:

a) Drawings of the general arrangement which clearly show ventilation arrangements in the pump room, air locks and gas-dangerous spaces, and the arrangement of slop tanks.

b) Plan of the tank arrangement.

The following minimum requirements shall apply unless special provisions are to be observed in accordance with Chapter 15 of the IBC Code and Chapter IV of the BCH Code:

a) New ships shall comply with regulations 3.1 up to and including 3.7 of the IBC Code.

b) Existing ships shall comply with regulations 2.6 up to and including 2.9 of the BCH Code.

c) In addition to the requirements in regulation 3.2 of the IBC Code and regulation 2.7 of the BCH Code, entry to spaces containing the emergency fire pump or the like which are located in gas hazardous areas shall be through a gas lock.

The following minimum requirements shall apply unless special provisions are to be observed under Chapter 15 of the IBC Code and Chapter IV of the BCH Code:

a) New ships shall comply with regulations 12.1 up to and including 12.3 of the IBC Code.

b) Existing ships shall comply with regulations 3.1 and 3.2 of the BCH Code.

The following minimum requirements shall apply unless special provisions are to be observed under Chapter 15 of the IBC Code and Chapter IV of the BCH Code:

a) New ships shall comply with regulations 13.1 and 13.2 of the IBC Code.

b) Existing ships shall comply with regulations 3.9 up to and including 3.12 of the BCH Code.

The following minimum requirements shall apply unless special provisions are to be observed under Chapter 15 of the IBC Code and Chapter IV of the BCH Code:

a) New ships shall comply with regulations 14.1 and 14.2 of the IBC Code.

b) Existing ships shall comply with regulation 3.16 of the BCH Code.

(1) It must be ensured that no-one descends into cargo tanks, spaces surrounding such tanks, spaces for equipment to be used during loading/discharging operations and other enclosed spaces before it has been ascertained that the space is free from toxic gases and that there is sufficient oxygen in the spaces, or that the necessary safety equipment is used and that a responsible officer is present.

(2) The following shall be observed during loading/discharging operations:

a) Personal protective equipment shall be used during all working operations.

b) Any operation connected with loading, discharging or cleaning of tanks shall only be carried out according to special instructions and under the direct supervision of one of the ship’s officers or specially trained persons from ashore.

c) Warning notices with information on the hazards associated with the cargo shall be posted at the gangway. The wording shall always include the following: Danger (name of cargo to be inserted), No Visitors, No Smoking or Naked Lights.
(3) Repair work, e.g. repairs to pumps, valves, fittings, repacking of stuffing boxes, etc., shall be carried out only in accordance with detailed working instructions and under the direct supervision of one of the ship’s officers. The master of the ship shall ensure that such working instructions for the necessary repair work are available on board.

§ 2-10
Safety officer

(1) One of the ship’s officers shall be appointed safety officer.
(2) The ship’s safety officer shall ensure that the safety equipment and personal protective equipment required pursuant to these regulations is in proper condition at all times and is stored on board in a satisfactory manner. He shall ensure that this equipment is used. He shall further ensure that the special safety precautions are complied with.

§ 2-11
Literature and notices

(1) The ship’s company or master shall ensure that the necessary literature relating to the cargo in question in regard to fire or explosion hazard, toxicity, health hazard, symptoms of illness, precautions to be taken in the event of damage to equipment or cargo, injury to persons, etc. is available on board. The Tanker Safety Guide (Chemicals) issued by the International Chamber of Shipping should be carried on board. The Medical First Aid Guide for Use in Accidents Involving Dangerous Goods shall be carried on board.
(2) Notices giving information on the physical data and possible health hazards of the cargo and stating what precautions are to be taken in the event of an accident or injury shall be posted in Norwegian and English in all mess rooms.

§ 2-12
Medical examination

The crew of ships carrying chemicals may be medically examined in accordance with the regulations in force at the time in question relating to the medical examination of employees on ships.

Chapter III
Ships carrying liquefied gases in bulk

§ 3-1
Scope of application

(1) The provisions of this chapter shall apply to gas carriers on national and international voyages.
(2) New ships shall comply with the provisions of Chapter VII, part C of the SOLAS Convention and the provisions of the IGC Code.
(3) Existing ships shall observe the recommendations of the Gas Carrier Code as requirements.
(4) Existing gas carriers which undergo major repairs, alterations or modifications shall comply with the provisions for new ships.
(5) For any ship converted to a gas carrier, the date of the commencement of the conversion shall determine whether the ship shall comply with the provisions for new or for existing gas carriers.

§ 3-2
Definitions

(1) For the purpose of this chapter, the following definitions shall apply:
   a) Existing ship: A ship that is not a new ship. A ship purchased from abroad is considered equivalent to an existing ship.
   b) Liquid substances: Cargoes with an absolute vapour pressure not exceeding 2.8 bar at 37.8 degrees C. See also Chapter XVII of the IBC Code.
   c) Gas Carrier Code: Code for the Construction and Equipment of Ships Carrying Liquefied Gases in Bulk, as adopted by the Maritime Safety Committee by resolution A.328(IX), with subsequent amendments.
   d) Gas carrier: A cargo ship that is constructed or arranged and used for the carriage in bulk of any liquefied gas or other product listed in Chapter 19 of the IGC Code.

1 Regulation of 19 October 2001 No. 1309 concerning the medical examination of employees on ships.
c) **IGC Code**: International Code for the Construction and Equipment of Ships Carrying Liquefied Gases in Bulk, adopted by the Maritime Safety Committee by resolution MSC.5(48), as may be amended by the Organization.

f) **New ship**: A ship the keel of which was laid or which had reached a similar stage of construction on or after 1 July 1986.

g) **“A similar stage of construction”** means the stage of construction where:
   1. the construction of a specific ship can be established as started; and
   2. the parts of the ship that have been put together comprise at least 50 tons or constitute 1% of the calculated weight of the building material, if this is less.

(2) In other respects the definitions contained in the IGC and Gas Carrier Codes shall apply.

### § 3-3

**Survey and issue of a certificate**

(1) Before a ship is put into service in the carriage of liquefied gases in bulk it shall be surveyed. The ship shall subsequently be surveyed in accordance with the provisions of the SOLAS Convention.

(2) In the case of ships that are classed in a recognized survey organization, the survey organization shall issue a written statement to the Norwegian Maritime Directorate to the effect that the ship satisfies respectively the regulations of the IGC Code, the Gas Carrier Code or the code for existing gas carriers with regard to the carriage of liquefied gases.

(3) The survey organization shall in all cases provide the Norwegian Maritime Directorate with a list of the cargoes which the ship is approved to carry and, where appropriate, cargoes which the ship is not approved to carry.

(4) Ships which are not classed in a recognized survey organization shall be approved by the Norwegian Maritime Directorate.

(5) When a ship has been found to comply with the provisions of this chapter, either an International Certificate for the carriage of liquefied gases in bulk (IGC Certificate) or a certificate for the carriage in bulk of liquefied gases in accordance with the Gas Carrier Code, or a certificate for the carriage in bulk of liquefied gases in accordance with the code for existing gas carriers is issued, as appropriate. The certificates are issued by the Norwegian Maritime Directorate.

### § 3-4

**Drawings**

In addition to the drawings required to be submitted pursuant to other regulations, one copy of the following drawings shall be sent to the Norwegian Maritime Directorate:

a) A drawing of the general arrangement which clearly indicates primary and secondary barriers, cofferdams, fuel oil tanks adjacent to the cargo tank area, double bottom tanks, the positioning of service spaces, control rooms, cargo control rooms, openings to accommodation, hatches if any in the first poop deck, gas locks, etc.

b) Plan of the tank arrangement.

c) Arrangement of fixed gas-detection systems. Installation of pipelines for gas detection using portable equipment.

d) Basic diagram showing the arrangement for detection of gas in the cargo tanks and for freeing the tanks of gas.

### § 3-5

**Arrangement, etc.**

The following minimum requirements shall apply unless special provisions are to be observed in accordance with Chapter 17 of the IGC Code and Chapter XVII of the Gas Carrier Code:

a) New ships shall comply with regulations 3.1 up to and including 3.8 of the IGC Code.

b) Existing ships shall comply with regulations 3.1 up to and including 3.8 of the Gas Carrier Code.

### § 3-6

**Ventilation in cargo pump rooms, etc.**

The following minimum requirements shall apply unless special provisions are to be observed in accordance with Chapter 17 of the IGC Code and Chapter XVII of the Gas Carrier Code:

a) New ships shall comply with regulations 12.1 and 12.2 of the IGC Code.

b) Existing ships shall comply with regulations 12.1 and 12.2 of the Gas Carrier Code.
§ 3-7  
*Gas detection equipment*

The following minimum requirements shall apply unless special provisions are to be observed in accordance with Chapter 17 of the IGC Code and Chapter XVII of the Gas Carrier Code:

a) New ships shall comply with regulations 13.1 up to and including 13.6 of the IGC Code.

b) Existing ships shall comply with regulations 13.1 up to and including 13.6 of the Gas Carrier Code.

§ 3-8  
*Safety and personal protection equipment*

(1) New ships shall comply with regulations 14.1 up to and including 14.4 of the IGC Code.

(2) Existing ships shall comply with regulations 14.1 up to and including 14.9 of the Gas Carrier Code.

§ 3-9  
*Special safety precautions*

(1) It must be ensured that no-one descends into cargo tanks, spaces surrounding such tanks, spaces for equipment to be used during loading/discharging operations and other enclosed spaces before it has been ascertained that the space is free from toxic gases and that there is sufficient oxygen in the spaces, or that the necessary safety equipment is used and that a responsible officer is present.¹

(2) When inspecting spaces surrounding cargo tanks on gas carriers which are partly filled with perlite-insulation or the like, self-contained breathing apparatus shall be used during the inspection. Instructions shall be prepared.

(3) The following shall be observed during loading/discharging operations:

a) Personal protective equipment shall be used during all working operations.

b) Any operation connected with loading, discharging or cleaning of tanks shall only be carried out according to special instructions and under the direct supervision of one of the ship’s officers or specially trained persons from ashore.

c) Warning notices with information on the hazards associated with the cargo shall be posted at the gangway. The wording shall always include the following: Danger (name of cargo to be inserted), No Visitors, No Smoking or Naked Lights.

(4) Repair work, e.g. repairs to pumps, valves, fittings, repacking of stuffing boxes, etc., shall be carried out only in accordance with detailed working instructions and under the direct supervision of one of the ship’s officers. The master of the ship shall ensure that such working instructions for the necessary repair work are available on board.

¹ Ref. Regulations of 15 June 1987 No. 507 concerning safety measures, etc. on passenger ships, cargo ships and lighters.

§ 3-10  
*Safety officer*

(1) One of the ship’s officers shall be appointed safety officer.

(2) The ship’s safety officer shall ensure that the safety equipment and personal protective equipment required pursuant to these regulations is in proper condition at all times and is stored on board in a satisfactory manner. He shall ensure that the equipment is used. He shall further ensure that the special safety precautions are complied with.

§ 3-11  
*Operational requirements*

The following minimum requirements shall apply unless special provisions are to be observed in accordance with Chapter 17 of the IGC Code and Chapter XVII of the Gas Carrier Code:

a) New ships shall comply with regulations 18.1 up to and including 18.9 of the IGC Code.

b) Existing ships shall comply with regulations 18.1 up to and including 18.9 of the Gas Carrier Code.

§ 3-12  
*Literature and notices*

(1) The ship’s company or master shall ensure that the necessary literature relating to the cargo in question in regard to fire or explosion hazard, toxicity, health hazard, symptoms of illness, precautions to be taken in the event of damage to equipment or cargo, injury to persons, etc. is available on board. The Tanker Safety Guide (Chemicals) issued by the International Chamber of Shipping should be carried on board. The Medical First Aid Guide for Use in Accidents Involving Dangerous Goods shall be carried on board.
(2) Notices giving information on the physical data and possible health hazard of the cargo, and stating what precautions to take in the event of an accident or injury, shall be posted in English and Norwegian in all mess rooms.

§ 3-13

Medical examination

The crew on board ships carrying toxic liquefied gases may be medically examined in accordance with the regulations in force at the time in question relating to the medical examination of employees on ships.¹

¹ Reference is made to § 20 of Regulation of 11 January 2001 No. 21 concerning protection of workers on ships against exposure to chemical agents.

Chapter IV

Carriage of solid bulk cargoes on cargo ships and lighters/barges

§ 4-1

Scope of application

(1) The provisions of this chapter shall apply to:
   a) Norwegian cargo ships and lighters/barges carrying solid bulk cargoes on national and international voyages; and
   b) foreign cargo ships and lighters/barges carrying solid bulk cargoes from a Norwegian port, including ports on Svalbard and Jan Mayen.

(2) In foreign ports where stricter rules apply, Norwegian ships must comply with those rules.

Amended by Regulation of 29 June 2007 No. 1006 (in force on 1 July 2007).

§ 4-2

Definitions

For the purpose of this chapter, the following definitions shall apply:
   a) BC Code: The IMO’s Code of Safe Practice for Solid Bulk Cargoes, adopted by resolution A.434(XI), with subsequent additions and amendments.
   b) Bulk cargo: Cargo consisting of solid material in particle or granular form including concentrates with or without water content, generally uniform in composition, and which is loaded directly into the cargo spaces without packing.
   c) Document of Compliance relating to the carriage of dangerous goods: Document of Compliance Regarding Special Requirements of Ships Carrying Dangerous Goods pursuant to Chapter II-2, regulation 54.3 of the SOLAS Convention. The text of the Document of Compliance is laid down by the Norwegian Maritime Directorate.
   e) Grain-like cargoes: The designation covers wheat, oats, rye, rice, maize, legumes, seeds and products thereof which behave similarly to grain in the natural state.
   f) Cargo Securing Manual: The manual required under Chapters VI and VII of the SOLAS Convention, prepared in accordance with IMO guidelines (MSC/Circ.745).
   g) Special waste: Solid substances containing or contaminated by one or more elements covered by the BC Code and not intended for any practical use, but carried to be disposed of by dumping, incineration or any other disposal method.

Part 1

Carriage of solid bulk cargoes other than grain

§ 4-3

Scope of application

The provisions of Part 1 apply to cargo ships and lighters/barges carrying solid bulk cargoes other than grain.
§ 4-4

General requirements

(1) Cargo ships and lighters/barges carrying solid bulk cargoes other than grain shall comply with the provisions of Chapter VI, Part A and Part B, of the SOLAS Convention.

(2) Cargo ships and lighters/barges shall also comply with the provisions of the BC Code, sections 1 to 6, relating to safety precautions, trimming procedures, etc.

(3) A cargo certificate issued in a Norwegian port shall always include the information indicated in section 4 of the BC Code relating to, inter alia, transportable moisture limit, the angle of repose of the bulk cargo, and moisture content during loading.

§ 4-5

Additional requirements for the carriage of bulk cargoes which may become liquid during transport

For the transport of cargoes listed in Appendix A of the BC Code and other cargoes which may become liquid during transport, the provisions of sections 7 and 8 of the BC Code shall apply. Such substances shall be examined periodically every six months in accordance with Appendix D of the BC Code.

1 Laboratory checks in accordance with Appendix D of the BC Code are currently performed by SINTEF Rock and Mineral Engineering.

§ 4-6

Additional requirements for the carriage of bulk cargoes with chemical properties that may entail hazard during transport

For the transport of substances listed in Appendix B of the BC Code and other cargoes with chemical properties that may entail hazard during transport, the provisions of Appendix B and section 9 of the BC Code shall apply.

§ 4-7

Additional requirements for the carriage of special waste in bulk

For the transport and handling of special waste in bulk, the provisions of section 10 of the BC Code shall apply.

§ 4-8

Additional requirements for the carriage of solid bulk cargoes classified as «dangerous goods»

(1) Cargo ships and lighters/barges which are to carry solid bulk cargoes classified as «dangerous goods» in regulation VII/2 of the SOLAS Convention shall comply with the provisions of Chapter VII, Part A, of the SOLAS Convention.

(2) The following cargo ships, operating in great coasting or a greater trade area, shall comply with the special requirements of regulation II-2/54 of the SOLAS Convention for the carriage of dangerous goods:

a) Any cargo ship of 500 gross tonnage and upwards the keel of which is laid after 1 September 1984.

b) Any cargo ship of less than 500 gross tonnage the keel of which is laid after 1 February 1992.

(3) When cargo ships as described in the second paragraph are surveyed and found to comply with the requirements of regulation II-2/54 of the SOLAS Convention, the ship will be provided with a Document of Compliance relating to the carriage of dangerous goods. The Document of Compliance is issued for a period of up to five years by the Norwegian Maritime Directorate or whoever is authorized by the Norwegian Maritime Directorate.

(4) Survey for the issue and renewal of the Document of Compliance relating to the carriage of dangerous goods referred to in the third paragraph shall be carried out as follows:

a) For cargo ships of 500 gross tonnage and upwards, surveys and validity periods shall be harmonized with the ship’s safety construction certificate.

b) For cargo ships of less than 500 gross tonnage, surveys and validity periods shall be harmonized with the ship’s trading certificate.
Part 2
Carriage of grain in bulk

§ 4-9
Scope of application
The provisions of Part 2 apply to cargo ships and lighters/barges carrying grain or grain-like cargoes in bulk.

§ 4-10
Convention provisions and special requirements
(1) Cargo ships and lighters/barges carrying grain or grain-like cargoes in bulk shall comply with the provisions of Chapter VI, Part A and Part C, of the SOLAS Convention, and with the provisions of the Grain Code.
(2) Any previous approval for the carriage of grain in bulk granted pursuant to these regulations prior to the amendments of 22 April 1997 No. 994 or pursuant to the regulations of 10 July 1970 concerning the carriage of grain on ships or subsequent regulations will remain valid, provided that no changes have been made to the vessel’s trade area, construction, cargo carrying capacity or freeboard after the approval was granted. If changes are made to the vessel’s trade area, construction, cargo carrying capacity or freeboard, the provisions of Chapter VI, Part A and Part C, of the SOLAS Convention and the provisions of the Grain Code for vessels built after 25 May 1980 shall apply.

Chapter V
Carriage of dangerous packaged goods

Part 1
General provisions

§ 5-1
Scope of application
This chapter applies to the carriage of dangerous packaged goods at sea on domestic and international voyages as stated in the individual parts of the chapter.

§ 5-2
Definitions
(1) For the purpose of this chapter, the following definitions shall apply:
a) ADR Convention: The European agreement currently in force concerning the road transport of dangerous goods, dated 30 September 1957, with appendices and annexes.
c) Document of Compliance relating to the carriage of dangerous goods: Document of Compliance Regarding Special Requirements of Ships Carrying Dangerous Goods pursuant to Chapter II-2, regulation 54.3 of the SOLAS Convention. The text of the Document of Compliance is laid down by the Norwegian Maritime Directorate.
d) Dangerous goods:
   1. For passenger ships on domestic voyages: Substances included in the provisions of the IMDG Code or the ADR Convention.
   2. For cargo ships on domestic voyages: Substances included in the provisions of the IMDG Code.
   3. On international voyages: Substances included in the provisions of the IMDG Code.
e) Trade area: By a trade area is meant closely defined waters in which a ship may operate as provided in the regulations currently in force concerning trade areas.
f) Ferry: A passenger ship which is also specially arranged for the transport of cars, railway carriages and other vehicles.
g) Fishing vessel: Any vessel used commercially for catching fish, whales, seals, or other living resources of the sea, including seaweed and sea tangle.
h) **Supply ship:** Any ship which is built and equipped for carrying out supply services, anchor handling, and similar services.

i) **Passenger high-speed craft:** A passenger ship capable of reaching a speed of 25 knots or more.

j) **IMDG Code:** International Maritime Dangerous Goods Code, adopted by the International Maritime Organization by resolution A.81(IV), as amended.

k) **Cargo ship:** A ship which is not a passenger ship, a fishing vessel or a lighter/barge and not employed in the service of the Naval Defence.

l) **Lighter/barge:** Any hull or ship without propulsion machinery, which is towed or pushed whenever moved, and which is used for the carriage of cargo.

m) **MFAG:** Medical First Aid Guide, recommendations for medical first aid in accidents involving dangerous goods, adopted by the International Maritime Organization.

n) **Dangerous packaged goods:** Dangerous goods in packaging in accordance with the provisions of the IMDG Code and/or the ADR Convention. As dangerous packaged goods are also considered road transport units carrying unpacked dangerous goods in tanks.

o) **Passenger:** Every person on board other than:
   1. the master and members of the crew, or other persons employed or engaged in any capacity on board a ship on the business of that ship; and
   2. children under the age of one year.

p) **Passenger ship:** A ship that can carry more than 12 passengers or which is required to have official permission to carry passengers.

q) **Stowage on deck:** Stowage on open deck.

r) **Stowage below deck:** Stowage on deck or parts of a deck which is weatherproof from weather and sea.

s) **Tank vehicle:** Motor vehicle with one or more fixed tanks for the transport of liquids, solids, or gases.

t) **Road transport unit:** Motor vehicle with or without a trailer attached.

(2) Otherwise the definitions of the IMDG Code shall apply.

Amended by Regulation of 29 June 2007 No. 1006 (in force on 1 July 2007).

§ 5-3

**Competent authority**

(1) The Norwegian Maritime Directorate may assist in providing supplementary information on the application of the Code. As far as carriage of radioactive material, class 7, is concerned, the master or owner may obtain supplementary information from the Norwegian Radiation Protection Authority.

(2) The stations (local offices) of the Norwegian Maritime Directorate may also assist in providing supplementary information.

§ 5-4

**Shipper’s duties**

Dangerous goods offered for sea transport shall be marked and packaged in compliance with applicable regulations and accompanied by the necessary transport documents.

§ 5-5

**Refusal of goods**

(1) Dangerous goods which do not comply with the provisions of this chapter shall be refused for transport. Goods in damaged packaging shall always be refused.

(2) If justified by special weather conditions, the shipmaster may refuse a transport unit.

Part 2

**Carriage on passenger ships**

§ 5-6

**Scope of application**

Chapter VII of the SOLAS Convention and the provisions of the IMDG Code currently in force shall apply. The Code shall also be applied where the Code contains only a recommendation.
§ 5-7
Training

All crew members who are to perform duties involving the evaluation and treatment of dangerous packaged goods on passenger ships, shall receive training in the handling of and safety measures for dangerous packaged goods. The training must be documentable.

§ 5-8
(Repealed 18 September 1997)

A. Carriage on passenger ships in foreign trade

§ 5-9
Scope of application of Part 2 A


(2) The provisions and recommendations of the IMDG Code shall apply.

(3) A passenger ship whose keel was laid on 1 September 1984 or later shall also comply with the special requirements for the carriage of dangerous goods contained in the SOLAS Convention, Chapter II-2, regulation 41. Such passenger ships shall also comply with the requirements of the SOLAS Convention, Chapter II-2, regulation 54. When a ship is surveyed and found to comply with these requirements, the ship will be provided with a Document of Compliance relating to the carriage of dangerous goods. A Document of Compliance is issued for a period of up to five years by the Norwegian Maritime Directorate or whoever is authorized by the Directorate.

B. Carriage on passenger ships in domestic trade

§ 5-10
Scope of application of Part 2 B

(1) Chapter VII of the SOLAS Convention and the IMDG Code currently in force shall apply.

(2) As an alternative to the rules of Chapter VII of the SOLAS Convention and the IMDG Code, the rules of Part 2 B (§§ 5-11 to 5-21) may be applied for the carriage of dangerous goods placed on or in road transport units or other transport units such as tank vehicles, tank containers and other containers when goods are carried on passenger ships in domestic trade.

(3) Routines for the securing of cargo shall be incorporated into the vessel’s safety management system.

(4) Concerning the refusal of goods, refer to § 5-5.

§ 5-11
Classification

Dangerous goods are classified as follows:

<table>
<thead>
<tr>
<th>Class</th>
<th>IMDG subgroups</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1.1, 1.2, 1.3, 1.4, 1.5, and 1.6</td>
<td>Explosive substances and objects</td>
</tr>
<tr>
<td>2</td>
<td>2.1, 2.2, and 2.3 ADR</td>
<td>Gases: compressed, liquefied or dissolved under pressure</td>
</tr>
<tr>
<td></td>
<td>letters: F, A, O, T, TF, TC, TO, TFC, and TOC</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>3.1 (Flash point below -18°C) 3.2 (Flash point from -18°C to +23°C) 3.3 (Flash point from +23°C to +61°C)</td>
<td>Flammable liquids</td>
</tr>
<tr>
<td>Class</td>
<td>Description</td>
<td></td>
</tr>
<tr>
<td>---------</td>
<td>-------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>4.1</td>
<td>Flammable solids</td>
<td></td>
</tr>
<tr>
<td>4.2</td>
<td>Substances liable to spontaneous combustion</td>
<td></td>
</tr>
<tr>
<td>4.3</td>
<td>Substances which, in contact with water, emit flammable gases</td>
<td></td>
</tr>
<tr>
<td>5.1</td>
<td>Oxidizing substances</td>
<td></td>
</tr>
<tr>
<td>5.2</td>
<td>Organic peroxides</td>
<td></td>
</tr>
<tr>
<td>6.1</td>
<td>Poisonous (toxic) substances</td>
<td></td>
</tr>
<tr>
<td>6.2</td>
<td>Infectious substances</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Radioactive materials</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Corrosives</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Miscellaneous dangerous substances and objects</td>
<td></td>
</tr>
</tbody>
</table>

**§ 5-12**  
*Requirements for identification*

(1) IMDG Code: Dangerous packaged goods shall be identified in accordance with the general part of the IMDG Code, volume 1, Chapter 7.1.
(2) ADR: Identification of dangerous packaged goods in accordance with the general provisions of the ADR Convention, marginal 2002 and section B for the individual classes, may also be accepted.
(3) For flammable liquids in class 3, the flash point of the liquid shall also be indicated as described in the general part of the IMDG Code, volume 1, Chapter 5.1.3, or danger category indicated as described in the ADR Convention, marginal 2300.

**§ 5-13**  
*Requirements for packaging and transportable tanks*

(1) Packaging for dangerous packaged goods shall be approved in accordance with the general part of the IMDG Code, Annex I. Intermediate bulk containers (IBCs) shall be approved in accordance with paragraph 26 of the general part of the IMDG Code.
(2) Transportable tanks shall be approved in accordance with section 13 of the general part of the IMDG Code.
(3) Packaging for dangerous packaged goods (including IBCs) approved in accordance with the ADR Convention, Annexes A.5 and A.6, is permitted. For tank vehicles reference is made to § 5-18 of the present regulations.
(4) Any carriage of dangerous packaged goods not packaged in accordance with the provisions of this section shall be refused.

**§ 5-14**  
*Requirements for marking*

(1) IMDG Code: Dangerous goods shall be clearly marked in accordance with the IMDG Code before they are offered for sea transport.
(2) ADR: Dangerous packaged goods may alternatively be marked in accordance with the ADR Convention.
(3) Any carriage of dangerous packaged goods not marked in accordance with the provisions of this section shall be refused.
§ 5-15

Requirements for documentation

(1) For all carriage of dangerous goods there shall be a transport document containing a precise technical description of the goods. Carriage in accordance with the IMDG Code shall comply with the requirements for documentation contained in the IMDG Code. Carriage in accordance with the ADR Convention shall comply with the requirements for documentation contained in the ADR Convention.

(2) The transport document may be the «Dangerous Goods Declaration» in accordance with the IMDG Code. Further, it may be a transport document (freight bill or similar) with transport accident card in accordance with the ADR Convention or a freight bill in accordance with the Act of 21 May 1971 No. 47 relating to flammable goods and liquids and gases under pressure.

(3) The transport document shall be given to the ship’s master.

(4) Any carriage of dangerous packaged goods not documentable in accordance with the provisions of this section shall be refused.

§ 5-16

Instructions, etc. in case of accidents

(1) With regard to accidents or emergencies, the shipper is under an obligation to provide written information about:

a) what sorts of danger are associated with the dangerous substances carried, and what safety measures are necessary to prevent these dangers;
b) what must be done and what treatment given in the case of persons who have come into contact with the substances carried or substances emitted from these;
c) precautions in the event of fire, and particularly the fire extinguishing methods which must not be used; and
d) precautions in the event of damage to the packaging of dangerous substances carried.

(2) The instructions shall be prepared for each dangerous substance or class of dangerous substances carried. A transport accident card with text in either a Scandinavian language or in the English language may be accepted.

(3) «Emergency Procedures for Ships Carrying Dangerous Goods» (EmS) and «Medical First Aid Guide» (MFAG) for use in accidents involving dangerous goods shall be carried on board.

(4) Written instructions may be omitted when the transport documents contain references to EMS numbers and MFAG numbers.

(5) One set of these instructions or references to EMS and MFAG shall be given to the ship’s master. These instructions must be available to the ship’s crew.

§ 5-17

Safety provisions

(1) The transport units shall be placed in marked zones or in specially assigned places. The stowage of a transport unit must be such as to ensure access to the unit.

(2) Smoking on car decks is strictly prohibited. It is likewise prohibited to smoke in cars parked on the car deck. Prohibition signs shall be posted in clearly visible places. On partially open/enclosed ferries, the smoking prohibition shall also apply on superjacent free decks.

(3) Ships carrying dangerous packaged goods in accordance with these regulations shall be provided with fire and safety equipment, in accordance with the Emergency Procedures for Ships Carrying Dangerous Goods (EmS) and the Medical First Aid Guide (MFAG), which is appropriate to the types of dangerous goods that are to be carried on a particular voyage.

(4) The master must ensure the availability on board the ship of equipment which is appropriate to the types of dangerous goods carried on the voyage concerned.

§ 5-18

Requirements for tank vehicles, etc.

(1) Tank vehicles and motor vehicles for the transport of certain explosives shall be approved by the relevant authority (for domestic transport the Directorate for Fire and Electrical Safety). Tank vehicles registered in foreign countries must be approved in accordance with the ADR Convention in the country concerned.

(2) The driver is responsible for keeping under observation the tank vehicle or motor vehicle for the transport of dangerous goods during the voyage. In the event of an unforeseen incident, the driver shall immediately alert the ship’s master and act according to the accident instructions.
§ 5-19
Requirements for stowage and segregation

(1) Dangerous packaged goods placed on/in a road transport unit or other transport units such as tank vehicles, tank containers and other containers shall be stowed and segregated either in accordance with the segregation plan of the IMDG Code (15.4.2) or according to the specifications in Appendices 1 and 2 to these regulations.

(2) Empty containers and other packaging previously used for the transport of dangerous packaged goods shall be treated as dangerous goods unless they have been cleaned or adequate measures are taken to eliminate all hazards related to classes 1 to 9. Such cleaning or such measures shall be documented.

§ 5-20
Deviation from requirements for stowage and segregation
according to footnote 1) in Appendices 1 and 2

(1) The carriage of dangerous packaged goods on a transport unit is permitted when such goods are placed in specially marked zones or in assigned, approved locations.

(2) One transport unit per voyage may be permitted according to the present deviation rule.

(3) On open ferries where the transport unit may be placed on open decks, a larger number of transport units may nevertheless be permitted in certain cases, provided that the ferry’s fire extinguishing equipment and other equipment is taken into consideration. There shall be an unobstructed passage of at least 1.5 metres around the transport unit. Such permission must be obtained from the Norwegian Maritime Directorate for each individual ferry. Permission may be granted for a definite period not exceeding five years.

§ 5-21
Dangerous goods in limited quantities

Transport documents of limited quantities carried in accordance with either the IMDG Code or the ADR Convention shall be presented, unsolicited, upon embarkation.

a) IMDG Code: Dangerous packaged goods in limited quantities may be carried in accordance with section 18 of the Code. On the transport document shall be entered «begrensede mengder» or «limited quantities».

b) ADR Convention:
1. Dangerous packaged goods in limited quantities which according to the ADR Convention’s marginal 10011 are permitted to be carried on a transport unit, may be carried without restrictions. The transport document shall state: «overskrider ikke begrensede mengder i henhold til marginal 10011» or «Load not exceeding the exemption limits prescribed in marginal 10011».

2. For limited quantities in class 1, explosives, 50 kg shall be the highest limit.

3. Empty packaging in limited quantities shall be treated as prescribed by § 5-19 of these regulations.

4. For the calculation of limited quantities of different substances, refer to Part 1 of the ADR Convention concerning general provisions relating to the carriage of dangerous goods in all classes.

5. Dangerous goods on passenger high-speed craft:
Carriage of dangerous packaged goods is generally not permitted on board passenger high-speed craft. In exceptional cases up to 5 kg (net weight) may be permitted for class 1 or up to 25 kg (gross weight) for other classes unless a smaller quantity is prescribed by the ADR Convention or the IMDG Code. A precondition for such carriage is that the goods are transported in a suitable box or similar on an open deck and properly segregated.

Part 3
Carriage of dangerous packaged goods on cargo ships and lighters/barges

§ 5-22
Scope of application

The provisions of part 3 apply to cargo ships and lighters/barges carrying dangerous packaged goods.
§ 5-23

Convention provisions and special requirements

(1) Cargo ships in foreign trade shall comply with the provisions in Chapter VI, Part A and Chapter VII, Part A of the SOLAS Convention. The requirement for an approved Cargo Securing Manual shall be complied with not later than 31 December 1997. The manual shall be approved by the Norwegian Maritime Directorate or whoever is authorized by the Directorate.

(2) The following cargo ships operating in great coasting or a greater trade area shall comply with the special requirements of SOLAS, regulation II-2/54, for the carriage of dangerous goods:
   a) Cargo ships of 500 gross tonnage and upwards whose keel is laid after 1 September 1984.
   b) Cargo ships of less than 500 gross tonnage whose keel is laid after 1 February 1992.

(3) When a cargo ship as mentioned in the second paragraph is surveyed and found to comply with the requirements of SOLAS, regulation II-2/54, the ship will be provided with a Document of Compliance relating to the carriage of dangerous goods. A Document of Compliance is issued for a period of up to five years by the Norwegian Maritime Directorate or whoever is authorized by the Norwegian Maritime Directorate.

(4) Survey for the issue and renewal of the Document of Compliance relating to the carriage of dangerous goods referred to in the third paragraph shall be carried out as follows:
   a) For cargo ships of 500 gross tonnage and upwards, surveys and validity periods shall be harmonized with the ship’s safety construction certificate.
   b) For cargo ships of less than 500 gross tonnage, surveys and validity periods shall be harmonized with the ship’s trading certificate.

(5) For cargo ships in domestic trade and lighters/barges in all trade areas, Chapter VI, Part A and Chapter VII, Part A of the SOLAS Convention shall apply correspondingly, with the exception of the following:
   a) The requirement for a Cargo Securing Manual or an equivalent documented cargo securing system shall be complied with not later than 31 December 1997. For these vessel categories, the manual or equivalent system is not required to be approved by the Norwegian Maritime Directorate or whoever is authorized by the Norwegian Maritime Directorate.

(6) Cargo ships and lighters/barges in all trade areas shall comply with the provisions and recommendations of the IMDG Code.

Part 4

Carriage of dangerous goods on supply vessels to/from and between installations on the Norwegian continental shelf

§ 5-24

Scope of application

Chapter VII of the SOLAS Convention and the provisions of the IMDG Code currently in force shall apply. The Code shall be applied also where it contains only a recommendation.

§ 5-25

Deviation from § 5-24

(1) The IMDG Code’s requirements for marking, documentation and stowage may be deviated from provided that the below conditions are met.
   a) Marking:
      The goods must be carried in a closed container and each parcel must be marked with a danger note. Containers with products classified in accordance with the IMDG Code shall be equipped with a danger note of a minimum size of 10 x 10 cm. The danger note shall be clearly visible to the ship’s crew.

(2) Marking in accordance with other international transport codes based on the UN recommendation for transport of dangerous goods is permitted.
   a) Documentation:
      1. The ship’s master and crew must at all times be aware of the type and quantity of dangerous goods which are carried and where the goods are located. This shall be specified on a cargo list.
      2. The ship’s company or master shall ensure that the necessary specialist literature is available on board, covering the cargo in question with regard to fire and explosion hazards, toxicity, health risks, symptoms of illness, precautions in the event of damage to equipment and cargo and injuries to persons, etc.
      3. Notices with information about precautions in the event of accidents or casualties shall be posted in clearly visible places.
b) Stowage:
   1. Stowage of containers with dangerous goods is supposed to take place on open deck. Dangerous goods which according to the IMDG Code shall be stowed:
      1.1. «away from» may be stowed in the same container when:
          1.1.1 the goods cannot cause unwanted reactions; or
          1.1.2 the goods are not of different hazard classes;
      1.2. «separated from» may be stowed in the same container on the same conditions, provided that a segregation of three metres is ensured;
   2. «Separated by a complete compartment or hold from» may be stowed on open deck in different containers at least three metres apart.

(3) Only goods packaged in accordance with the requirements of the IMDG Code for packaging, Annex 1 (Packing Recommendations), are permitted loaded.

Part 5
Carriage of packaged irradiated nuclear fuel, plutonium and high-level radioactive wastes

§ 5-26
Carriage of packaged irradiated nuclear fuel, plutonium and high-level radioactive wastes

Chapter VII Part D of the SOLAS Convention and the INF Code shall apply to ships to which these regulations apply in respect of special requirements for the carriage of packaged irradiated nuclear fuel, plutonium and high-level radioactive wastes.

Amended by Regulation of 4 October 2002 No. 1120.

Chapter VI
Carriage of packaged goods to which the provisions of Chapter V do not apply

§ 6-1
Definitions

Cargo Securing Manual: Manual as required by Chapter VI of the SOLAS Convention, prepared in accordance with IMO guidelines (MSC/Circ.745).

§ 6-2
Scope of application

The provisions of Chapter VI shall apply to passenger ships, cargo ships and lighters/barges which are to carry packaged goods not covered by the definition of «dangerous packaged goods» in Chapter V, but which may pose a danger to the ship or persons on board it so that precautions may be necessary.

§ 6-3
Convention provisions and special requirements

(1) Passenger ships and cargo ships in foreign trade shall comply with the provisions in Chapter VI, Part A of the SOLAS Convention. The requirement for an approved Cargo Securing Manual shall be complied with not later than 31 December 1997. The manual shall be approved by the Norwegian Maritime Directorate or whoever is authorized by the Norwegian Maritime Directorate.

(2) For cargo ships in domestic trade and lighters/barges in all trade areas, Chapter VI, Part A of the SOLAS Convention shall apply correspondingly, with the exception of the following: The requirement for a Cargo Securing Manual or an equivalent documented cargo securing system shall be complied with not later than 31 December 1997. For these vessel categories, the manual or equivalent system is not required to be approved by the Norwegian Maritime Directorate or whoever is authorized by the Norwegian Maritime Directorate.
Chapter VI
I Other provisions

§ 7-1
Control
The Norwegian Maritime Directorate or whoever is authorized by the Norwegian Maritime Directorate may exercise control to ensure that the provisions of these regulations are complied with on Norwegian ships and on foreign ships in Norwegian ports.

§ 7-2
Appeal
Decisions made pursuant to these regulations may be appealed under § 28 of the Public Administration Act.

§ 7-3
Exemptions
The Norwegian Maritime Directorate may, in individual cases and upon written application, grant exemption from the requirements of these regulations. There must be special reasons that make the exemption necessary and it must be justifiable in terms of safety. Exemptions can only be granted where they do not contravene international agreements to which Norway has acceded.

§ 7-4
Entry into force and repeal of regulations
(1) These regulations enter into force on 21 May 1987.
(2) The following are repealed as from the same date:
   a) Regulations of 16 September 1908 No. 3814 concerning carriage of specially inflammable substances on board ships without a passenger certificate.
   b) Chapters II, III, IV and V of the Regulations of 30 November 1979 No. 7 concerning carriage by ship of special or dangerous cargoes in bulk or as packaged goods.

Appendix 1
Stowage plan in accordance with the ADR Convention for road transport units and other transport units such as tank vehicles, tank containers and other containers

<table>
<thead>
<tr>
<th>ADR CLASS 1</th>
<th>Column 1 Passenger ships</th>
<th>Column 2 Passenger ships not carrying more than 12 passengers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>On deck</td>
<td>Below deck</td>
</tr>
<tr>
<td>Explosive substances in classes 1.1B and 1.2B</td>
<td>I</td>
<td>Not permitted</td>
</tr>
<tr>
<td>1.1C, 1.2C, 1.3C, 1.1D, 1.2D, 1.5D, 1.1E, 1.2E, 1.1G, 1.6N</td>
<td>II</td>
<td>Not permitted</td>
</tr>
<tr>
<td>1.2G, 1.3G</td>
<td>III</td>
<td>Permitted</td>
</tr>
<tr>
<td>ADR CLASS 2, 3 and 4</td>
<td>Column 1</td>
<td>Column 2</td>
</tr>
<tr>
<td>----------------------</td>
<td>----------</td>
<td>----------</td>
</tr>
<tr>
<td></td>
<td>Passenger ships</td>
<td>Passenger ships not carrying more than 25 passengers*</td>
</tr>
<tr>
<td></td>
<td>On deck</td>
<td>Below deck</td>
</tr>
<tr>
<td>Gases</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Nonflammable gas under letters A and O</td>
<td>2</td>
<td>Permitted</td>
</tr>
<tr>
<td>2. Flammable gas under letter F</td>
<td>Not permitted</td>
<td>Not permitted</td>
</tr>
<tr>
<td>3. Toxic gases under letters T, TF, TC, TO, TFC, and TOC</td>
<td>Not permitted</td>
<td>Not permitted</td>
</tr>
<tr>
<td>Flammable liquids</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Liquids with flash point below 23°C c.c. (ADR hazard categories (a) and (b)).</td>
<td>3</td>
<td>Not permitted</td>
</tr>
<tr>
<td>Liquids with flash point from 23°C up to and including 61°C c.c., and UN no. 1202 (ADR hazard category (c)).</td>
<td>Permitted</td>
<td>Permitted</td>
</tr>
<tr>
<td>Flammable solids</td>
<td>UN nos. 1944, 1945, 2254, and 2623</td>
<td>4.1</td>
</tr>
<tr>
<td>Other substances in the class of flammable solids</td>
<td>Not Permitted</td>
<td>Not Permitted</td>
</tr>
<tr>
<td>Substances liable to spontaneous combustion</td>
<td>4.2</td>
<td>Not permitted</td>
</tr>
</tbody>
</table>
Substances which in contact with water emit flammable gases

<table>
<thead>
<tr>
<th>ADR CLASS 5, 6, 7, 8 and 9</th>
<th>Column 1 Passenger ships</th>
<th>Column 2 Passenger ships not carrying more than 25 passengers*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>On deck</td>
<td>Below deck</td>
</tr>
<tr>
<td>Oxidizing substances</td>
<td>Not permitted</td>
<td>Not permitted</td>
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<td></td>
<td>Not permitted</td>
<td>Permitted</td>
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<td></td>
<td>Permitted</td>
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<tr>
<td>Organic peroxides</td>
<td>Not permitted</td>
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<tr>
<td>Poisonous substances</td>
<td>Not permitted</td>
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<td>Infectious substances</td>
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<tr>
<td>Radioactive substances</td>
<td>Permitted</td>
<td>Permitted</td>
</tr>
<tr>
<td></td>
<td>Permitted</td>
<td>Permitted</td>
</tr>
<tr>
<td>Corrosives UN nos. 1052,</td>
<td>Not permitted</td>
<td>Not permitted</td>
</tr>
<tr>
<td>1744, 1789, 1790, and 2576</td>
<td>Permitted</td>
<td>Permitted</td>
</tr>
<tr>
<td>Other UN nos.</td>
<td>Permitted</td>
<td>Not permitted</td>
</tr>
<tr>
<td></td>
<td>Permitted</td>
<td>Permitted</td>
</tr>
<tr>
<td>Dangerous substances and</td>
<td>Permitted</td>
<td>Not permitted</td>
</tr>
<tr>
<td>objects</td>
<td>Permitted</td>
<td>Permitted</td>
</tr>
</tbody>
</table>

* When a ship carries as passengers only the drivers and assistants of the transport units with dangerous goods, a maximum of one person per three metres of the overall length of the vessel may be permitted even if the number then exceeds 25, and this column may still be used in such cases.

1 Exceptions permitted pursuant to § 5-20.

Appendix 2

Segregation plan

<p>| ADR Class | 1 | I | 1 | 1 II | 1 III | 1 IV | 1 V | 1 VI | 1 VII | 1 VIII | 2 | 2 (i), (iii) | 3 | 4,1 | 4,2 | 4,3 | 5,1 | 5,2 | 6,1 | 6,2 | 7 | 8 | 9 |
|-----------|---|---|---|------|-------|------|-----|-----|------|-------|---|-------|---|-----|-----|-----|-----|-----|-----|---|---|---|
| 1 I       | 2 | 2 | 2 | 2    | 2     | 2    | 4   | 4   | 2    | 4     | 4   | 4     | 4   | 4   | 4   | 4   | 2   | 2   | 4   | 4   | 4   | 4   |
| 1 II      | 2 | 2 | 2 | 2    | 4     | 4    | 4   | 4   | 4    | 4     | 4   | 4     | 4   | 4   | 4   | 4   | 2   | 4   | 2   | 4   | 4   | 4   |
| 1 III     | 2 | 2 | 2 | 2    | 4     | 4    | 4   | 4   | 4    | 4     | 4   | 4     | 4   | 4   | 4   | 4   | 2   | 2   | 4   | 4   | 4   | 4   |
| 1 IV      | 2 | 2 | 2 | 2    | 4     | 4    | 4   | 4   | 4    | 4     | 4   | 4     | 4   | 4   | 4   | 4   | 2   | 2   | 4   | 4   | 4   | 4   |</p>
<table>
<thead>
<tr>
<th></th>
<th>1</th>
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<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 V</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>1 VI</td>
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<td>4</td>
<td>4</td>
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<td>4</td>
</tr>
<tr>
<td>1 VII</td>
<td>4</td>
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**REMARKS:** The numbers in the above plan denote the following:

1. To be segregated by a distance of three metres.
2. The distance shall be at least 12 metres in the horizontal plane (lengthwise and breadthwise).
3. The distance shall be at least 20 m in the horizontal plane (lengthwise and breadthwise).
4. The distance shall be at least 40 m in the horizontal plane (lengthwise and breadthwise).

(i) --- Gases under letter F.
(ii) --- Gases under letters A and O.
(iii) --- Gases under letters T, TF, TC, TO, TFC, and TOC.