CHAPTER 1.6

TRANSITIONAL MEASURES

1.6.1 General

1.6.1.1 Unless otherwise provided, the substances and articles of ADN may be carried until 30 June 2011 in accordance with the requirements of ADN applicable up to 31 December 2010.

1.6.1.2 (*Deleted*)

1.6.1.3 The transitional measures of 1.6.1.3 and 1.6.1.4 of ADR and RID, or falling within the scope of 4.1.5.19 of IMDG Code, concerning the packaging of substances and articles of Class 1, are also valid for carriage subject to ADN.

1.6.1.4 Instructions in writing which meet the requirements of section 5.4.3 applicable up to 31 December 2010 may continue to be used until 31 December 2012.

1.6.1.5-1.6.1.7 *(Reserved)*

1.6.1.8 Existing orange-coloured plates which meet the requirements of sub-section 5.3.2.2 applicable up to 31 December 2004 may continue to be used provided that the requirements in 5.3.2.2.1 and 5.3.2.2.2 that the plate, numbers and letters shall remain affixed irrespective of the orientation of the vehicle or wagon are met.

1.6.1.9 *(Reserved)*

1.6.1.10 Lithium cells and batteries manufactured before 1 July 2003 which had been tested in accordance with the requirements applicable until 31 December 2002 but which had not been tested in accordance with the requirements of ADR or RID applicable as from 1 January 2003, and appliances containing such lithium cells or batteries, may continue to be carried up to 30 June 2013 if all the other applicable requirements are fulfilled.

1.6.1.11-12 *(Reserved)*

1.6.1.13 (*Deleted*)

1.6.1.14 IBCs manufactured before 1 January 2011 and conforming to a design type which has not passed the vibration test of 6.5.6.13 of ADR or which was not required to meet the criteria of 6.5.6.9.5 (d) of ADR at the time it was subjected to the drop test, may still be used.

1.6.1.15 IBCs manufactured, remanufactured or repaired before 1 January 2011 need not be marked with the maximum permitted stacking load in accordance with 6.5.2.2.2 of ADR. Such IBCs, not marked in accordance with 6.5.2.2.2 of ADR, may still be used after 31 December 2010 but must be marked in accordance with 6.5.2.2.2 of ADR if they are remanufactured or repaired after that date.

1.6.1.16 Animal material affected by pathogens included in Category B, other than those which would be assigned to Category A if they were in culture (see 2.2.62.1.12.2), may be carried

in accordance with provisions determined by the competent authority until 31 December 2014.[1]

1.6.1.17 and 1.6.1.18 (*Deleted*)

1.6.1.19 The provisions of 2.4.3 and 2.4.4 concerning the classification of environmentally hazardous substances applicable until 31 December 2010 may be applied until 31 December 2013.

1.6.1.20 Notwithstanding the requirements of Chapter 3.4 applicable as from 1 January 2011, dangerous goods packed in limited quantities, other than those which are assigned figure "0" in column (7a) of table A of Chapter 3.2, may continue to be carried until 30 June 2015 in accordance with the requirements of Chapter 3.4 in force up to 31 December 2010. However, in such a case, the provisions of 3.4.12 to 3.4.15 in force as from 1 January 2011 may be applied as from 1 January 2011. For the purposes of the application of the last sentence of 3.4.13 (c), if the container carried is marked with the mark required in paragraph 3.4.12 applicable until 31 December 2010, the transport unit or wagon may be marked with the mark required in paragraph 3.4.15 applicable as from 1 January 2011.

1.6.2 Pressure receptacles and receptacles for Class 2

The transitional measures of sections 1.6.2 of ADR and RID are also valid for transport operations subject to ADN.

1.6.3 Fixed tanks (tank-vehicles and tank wagons), demountable tanks, battery vehicles and battery wagons

The transitional measures of sections 1.6.3 of ADR and RID are also valid for transport operations subject to ADN.

1.6.4 Tank-containers, portable tanks and MEGCs

The transitional measures of sections 1.6.4 of ADR and RID or of section 4.2.0 of the IMDG Code, depending on the case, are also valid for transport operations subject to ADN.

1.6.5 Vehicles

The transitional measures of section 1.6.5 of ADR are also valid for transport operations subject to ADN.

1.6.6 Class 7

The transitional measures of sections 1.6.6 of ADR and RID or of section 6.4.24 of the IMDG Code are also valid for transport operations subject to ADN.

[1] *Regulations for dead infected animals are contained e.g. in Regulation (EC) No. 1774/2002 of the European Parliament and of the Council of 3 October 2002 laying down health rules concerning animal by-products not intended for human consumption (Official Journal of the European Communities, No. L 273 of 10.10.2002, p. 1).*

1.6.7 Transitional provisions concerning vessels

1.6.7.1 *General*

1.6.7.1.1 For the purposes of Article 8 of ADN, section 1.6.7 sets out general transitional provisions in 1.6.7.2 (see Article 8, paragraphs 1, 2 and 4) and supplementary transitional provisions in 1.6.7.3 (see Article 8, paragraph 3).

1.6.7.1.2 In this section:

(a) "Vessel in service" means a vessel according to Article 8, paragraph 2 of ADN;

(b) "N.R.M." means that the requirement does not apply to vessels in service except where the parts concerned are replaced or modified, i.e. it applies only to vessels which are **n**ew (as from the date indicated), or to parts which are **r**eplaced or **m**odified after the date indicated; where existing parts are replaced by spare or replacement parts of the same type and manufacture, this shall not be considered a replacement 'R' as defined in these transitional provisions.

Modification shall also be taken to mean the conversion of an existing type of tank vessel, a type of cargo tank or a cargo tank design to another type or design at a higher level.

When in the general transitional provisions in 1.6.7.2 no date is specified after 'N.R.M.', it refers to N.R.M. after 26 May 2000. When in the supplementary transitional provisions in 1.6.7.3, no date is specified, it refers to N.R.M. after 26 May 2000.

(c) "Renewal of the certificate of approval after the …" means that the requirement shall be met at the next renewal of the certificate of approval following the date indicated. If the certificate of approval expires during the first year after the date of application of these Regulations, the requirement shall be mandatory only after the expiry of this first year.

1.6.7.2 *General transitional provisions*

1.6.7.2.1 *General transitional provisions for dry cargo vessels*

1.6.7.2.1.1 Vessels in service shall meet:

(a) the requirements of paragraphs mentioned in the table below within the period established therein;

(b) the requirements of paragraphs not mentioned in the table below at the date of application of these Regulations.

The construction and equipment of vessels in service shall be maintained at least at the previous standard of safety.

1.6.7.2.1.1 Table of general transitional provisions: Dry cargo		
Paragraphs	Subject	Time limit and comments
9.1.0.12.1	Ventilation of holds	N.R.M. Renewal of the certificate of approval after 31 December 2018 Until then, the following requirements apply on board vessels in service: Each hold shall have appropriate natural or artificial ventilation; for the carriage of substances of Class 4.3, each hold shall be equipped with forced-air ventilation; the appliances used for this purpose must be so constructed that water cannot enter the hold.
9.1.0.12.3	Ventilation of service spaces	N.R.M. Renewal of the certificate of approval after 31 December 2018
9.1.0.17.2	Gas-tight openings facing holds	N.R.M. Renewal of the certificate of approval after 31 December 2018 Until then, the following requirements apply on board vessels in service: Openings of accommodation and the wheelhouse facing the holds must be capable of being tightly closed.
9.1.0.17.3	Entrances and openings in the protected area	N.R.M. Renewal of the certificate of approval after 31 December 2018 Until then, the following requirements apply on board vessels in service: Openings of engine rooms and service spaces facing the holds must be capable of being tightly closed.
9.1.0.31.2	Air intakes of engines	N.R.M. Renewal of the certificate of approval after 31 December 2034
9.1.0.32.2	Air pipes 50 cm above the deck	N.R.M. Renewal of the certificate of approval after 31 December 2018
9.1.0.34.1	Position of exhaust pipes	N.R.M. Renewal of the certificate of approval after 31 December 2018
9.1.0.35	Stripping pumps in the protected area	N.R.M. Renewal of the certificate of approval after 31 December 2018 Until then, the following requirements apply on board vessels in service: In the event of the carriage of substances of Class 4.1, UN No. 3175, of all substances of Class 4.3 in bulk or unpackaged and polymeric beads, expandable, of Class 9, UN No. 2211, the stripping of the holds may only be effected

1.6.7.2.1.1 Table of general transitional provisions: Dry cargo		
Paragraphs	Subject	Time limit and comments
		using a stripping installation located in the protected area. The stripping installation located above the engine room must be clamped.
9.1.0.40.1	Fire extinguishers, two pumps, etc.	N.R.M. Renewal of the certificate of approval after 31 December 2018
9.1.0.40.2	Fire extinguishing systems permanently fixed in engine rooms	N.R.M. Renewal of the certificate of approval after 31 December 2034
9.1.0.41 in conjunction with 7.1.3.41	Fire and naked light	N.R.M. Renewal of the certificate of approval after 31 December 2018 Until then, the following requirements apply on board vessels in service: Outlets of funnels shall be located not less than 2 m from the nearest point on hold hatchways. Heating and cooking appliances shall be permitted only in metal-based accommodation and wheelhouses. However: - Heating appliances fuelled with liquid fuels having a flashpoint above 55 °C shall be permitted in engine rooms - Central-heating boilers fuelled with solid fuels shall be permitted in spaces situated below deck and accessible only from the deck.
9.2.0.31.2	Air intakes of engines	N.R.M. Renewal of the certificate of approval after 31 December 2034
9.2.0.34.1	Position of exhaust pipes	N.R.M. Renewal of the certificate of approval after 31 December 2018
9.2.0.41 in conjunction with 7.1.3.41	Fire and naked light	N.R.M. Renewal of the certificate of approval after 31 December 2018 Until then, the following requirements apply on board vessels in service: Outlets of funnels shall be located not less than 2 m from the nearest point on hold hatchways. Heating and cooking appliances shall be permitted only in metal-based accommodation and wheelhouses. However: - Heating appliances fuelled with liquid fuels having a flashpoint above 55 °C shall be permitted in engine rooms - Central-heating boilers fuelled with solid fuels shall be permitted in spaces situated below deck and accessible only from the deck.

1.6.7.2.1.2 (*Deleted*)

1.6.7.2.2 *General transitional provisions for tank vessels*

1.6.7.2.2.1 Vessels in service shall meet:

(a) the requirements of paragraphs mentioned in the table below within the period established therein;

(b) the requirements of paragraphs not mentioned in the table below at the date of application of these Regulations.

The construction and equipment of vessels in service shall be maintained at least at the previous standard of safety.

1.6.7.2.2.2 Table of general transitional provisions for tank vessels

1.6.7.2.2.2 Table of general transitional provisions: Tank vessels		
Paragraphs	Subject	Time limit and comments
1.2.1	Limited explosion risk electrical apparatus	N.R.M. Renewal of the certificate of approval after 31 December 2034 Until then, the following requirements apply on board vessels in service: Limited explosion risk electrical apparatus is: - Electrical apparatus which, during normal operation, does not cause sparks or exhibit surface temperatures exceeding 200 °C; or - Electrical apparatus with a spray-water protected housing which, during normal operation, does not exhibit surface temperatures above 200 °C
1.2.1	Hold space	N.R.M. Renewal of the certificate of approval after 31 December 2038 for Type N open vessels whose hold spaces contain auxiliary appliances and which are carrying only substances of Class 8, with remark 30 in column (20) of Table C of Chapter 3.2.
1.2.1	Flame arrester Test according to standard EN 12 874:1999	N.R.M. from 1 January 2001 Renewal of the certificate of approval after 31 December 2034 Until then, the following requirements are applicable on board vessels in service: Flame arresters shall be of a type approved by the competent authority for the use prescribed.

1.6.7.2.2.2 Table of general transitional provisions: Tank vessels		
Paragraphs	Subject	Time limit and comments
1.2.1	High velocity vent valve Test according to standard EN 12 874:1999	N.R.M. Renewal of the certificate of approval after 31 December 2034 Until then, the following requirements are applicable on board vessels in service: High velocity vent valves shall be of a type approved by the competent authority for the use prescribed.
7.2.2.6	Approved gas detection system	N.R.M. Renewal of the certificate of approval after 31 December 2010
7.2.2.19.3	Vessels used for propulsion	N.R.M. Renewal of the certificate of approval after 31 December 2044
7.2.3.20	Use of cofferdams for ballasting	N.R.M. Renewal of the certificate of approval after 31 December 2038 Until then, the following requirements are applicable on board vessels in service: Cofferdams may be filled with water during unloading to provide trim and to permit residue-free drainage if possible.
7.2.3.20.1	Ballast water Prohibition against filling cofferdams with water	N.R.M. Renewal of the certificate of approval after 31 December 2038 Until then, the following requirements apply on board vessels in service: Cofferdams may be filled with ballast water only when cargo tanks are empty.
7.2.3.20.1	Proof of stability in the event of a leak connected with ballast water	N.R.M. Renewal of the certificate of approval after 31 December 2044 for Type G and Type N vessels
7.2.3.31.2	Motor vehicles only outside the cargo area	N.R.M. Renewal of the certificate of approval after 31 December 2034 for Type N vessels Until then, the following requirements apply on board vessels in service: The vehicle shall not be started on board.
7.2.3.51.3	Live sockets	N.R.M. Renewal of the certificate of approval after 31 December 2010 for Type G and Type N vessels

1.6.7.2.2.2 Table of general transitional provisions: Tank vessels		
Paragraphs	Subject	Time limit and comments
7.2.4.22.3	Sampling from other openings	N.R.M. Renewal of the certificate of approval after 31 December 2018 Until then, on board Type N open vessels in service cargo tank covers may be opened during loading for control and sampling.
9.3.2.0.1 (c) 9.3.3.0.1 (c)	Protection of vapour pipes against corrosion	N.R.M. from 1 January 2001 Renewal of the certificate of approval after 31 December 2034
9.3.1.0.3 (d) 9.3.2.0.3 (d) 9.3.3.0.3 (d)	Fire-resistant materials of accommodation and wheelhouse	N.R.M. Renewal of the certificate of approval after 31 December 2034
9.3.3.8.1	Continuation of class	N.R.M. Renewal of the certificate of approval after 31 December 2044 for Type N open vessels with flame arresters and Type N open vessels. Until then, the following requirements apply on board vessels in service: Except where otherwise provided, the type of construction, the strength, the subdivision, the equipment and the gear of the vessel shall conform or be equivalent to the construction requirements for classification in the highest class of a recognized classification society.
9.3.1.10.2 9.3.2.10.2 9.3.3.10.2	Door coamings, etc.	N.R.M. Renewal of the certificate of approval after 31 December 2034 Until then, the following requirements apply on board vessels in service, with the exception of Type N open vessels: This requirement may be met by fitting vertical protection walls not less than 0.50 m in height; Until then, on board vessels in service less than 50.00 m long, the height of 0.50 m may be reduced to 0.30 m in passageways leading to the deck.
9.3.1.10.3 9.3.2.10.3 9.3.3.10.3	Height of sills of hatches and openings above the deck	N.R.M. from 1 January 2005 Renewal of the certificate of approval after 31 December 2010
9.3.1.11.1 (b)	Ratio of length to diameter of pressure cargo tanks	N.R.M. Renewal of the certificate of approval after 31 December 2044
9.3.3.11.1 (d)	Limitation of length of cargo tanks	N.R.M. Renewal of the certificate of approval after 31 December 2044

1.6.7.2.2.2 Table of general transitional provisions: Tank vessels		
Paragraphs	Subject	Time limit and comments
9.3.1.11.2 (a)	Arrangement of cargo tanks Distance between cargo tanks and side walls Height of saddles	N.R.M. Renewal of the certificate of approval after 31 December 2044 for Type G vessels whose keels were laid before 1 January 1977
9.3.1.11.2 (a)	Arrangement of cargo tanks Distance between cargo tanks and side walls Height of saddles	N.R.M. Renewal of the certificate of approval after 31 December 2044 Until then, the following requirements apply on board vessels in service whose keels were laid after 31 December 1976: Where tank volume is more than 200 m^3 or where the ratio of length to diameter is less than 7 but more than 5, the hull in the tank area shall be such that, in the event of a collision, the tanks remain intact as far as possible. This requirement shall be considered as having been met where, in the tank area, the vessel: - is double-hulled with a distance of at least 80 cm between the side plating and the longitudinal bulkhead - or is designed as follows: (a) Between the gangboard and the top of the floorplates there shall be side stringers at regular intervals of not more than 60 cm; (b) The side stringers shall be supported by web frames spaced at intervals of not more than 2.00 m. The height of the web frames shall be not less than 10% of the depth and in any event not less than 30 cm. They shall be fitted with a face plate made of flat steel having a cross section of not less than 15 cm^2; (c) The side stringers referred to in (a) shall have the same height as the web frames and be fitted with a face plate made of flat steel having a cross section of not less than 7.5 cm^2.
9.3.1.11.2 (a)	Distance between suction wells and floor plates	N.R.M. Renewal of the certificate of approval after 31 December 2044
9.3.1.11.2 (b) 9.3.2.11.2 (b) 9.3.3.11.2 (a)	Cargo tank fastenings	N.R.M. Renewal of the certificate of approval after 31 December 2044
9.3.1.11.2 (c) 9.3.2.11.2 (c) 9.3.3.11.2 (b)	Capacity of suction well	N.R.M. Renewal of the certificate of approval after 31 December 2044
9.3.1.11.2 (d) 9.3.2.11.2 (d)	Side struts between the hull and the cargo tanks	N.R.M. from 1 January 2001 Renewal of the certificate of approval after 31 December 2044

1.6.7.2.2.2 Table of general transitional provisions: Tank vessels		
Paragraphs	Subject	Time limit and comments
9.3.1.11.3 (a)	End bulkheads of cargo area with "A-60" insulation. Distance of 0.50 m from cargo tanks to end bulkheads	N.R.M. Renewal of the certificate of approval after 31 December 2044
9.3.2.11.3 (a) 9.3.3.11.3 (a)	Width of cofferdams of 0.60 m Hold spaces with cofferdams or "A-60" insulated bulkheads Distance of 0.50 m from cargo tanks in hold spaces	N.R.M. Renewal of the certificate of approval after 31 December 2044 Until then, the following requirements apply on board vessels in service: Type C: minimum width of cofferdams: 0.50 m; Type N: minimum width of cofferdams: 0.50 m, on board vessels with a deadweight of up to 150 t: 0.40 m; Type N open: cofferdams shall not be required on board vessels with deadweight up to 150 t: The distance between cargo tanks and end bulkheads of hold spaces shall be at least 0.40 m.
9.3.3.11.4	Penetrations through the end bulkheads of hold spaces	N.R.M. from 1 January 2005 Renewal of the certificate of approval after 31 December 2044 for Type N open vessels whose keels were laid before 1 January 1977.
9.3.3.11.4	Distance of piping in relation to the bottom	N.R.M. from 1 January 2005 Renewal of the certificate of approval after 31 December 2038
9.3.3.11.4	Shut-off devices of the loading and unloading pipes in the cargo tank from which they come	N.R.M. from 1 January 2005 Renewal of the certificate of approval after 31 December 2018
9.3.3.11.6 (a)	Form of cofferdam arranged as a pump room	N.R.M. Renewal of the certificate of approval after 31 December 2044 for Type N vessels whose keels were laid before 1 January 1977.
9.3.3.11.7	Distance between the cargo tanks and the outer wall of the vessel	N.R.M. after 1 January 2001 Renewal of certificate of approval after 31 December 2038
9.3.3.11.7	Width of double hull	N.R.M. after 1 January 2010 Renewal of certificate approval after 31 December 2038
9.3.1.11.7	Distance between the suction well and the bottom spaces	N.R.M. after 1 January 2003 Renewal of certificate of approval after 31 December 2038

1.6.7.2.2.2 Table of general transitional provisions: Tank vessels		
Paragraphs	Subject	Time limit and comments
9.3.3.11.8	Arrangement of service spaces located in the cargo area below decks	N.R.M. Renewal of the certificate of approval after 31 December 2038 for Type N open vessels
9.3.1.11.8 9.3.3.11.9	Dimensions of openings for access to spaces within the cargo area	N.R.M. Renewal of the certificate of approval after 31 December 2018
9.3.1.11.8 9.3.2.11.10 9.3.3.11.9	Interval between reinforcing elements	N.R.M. Renewal of the certificate of approval after 31 December 2044
9.3.2.12.1 9.3.3.12.1	Ventilation openings in hold spaces	N.R.M. from 1 January 2003 Renewal of the certificate of approval after 31 December 2018
9.3.1.12.2 9.3.3.12.2	Ventilation systems in double-hull spaces and double bottoms	N.R.M. Renewal of the certificate of approval after 31 December 2018
9.3.1.12.3 9.3.2.12.3 9.3.3.12.3	Height above the deck of the air intake for service spaces located below deck	N.R.M. Renewal of the certificate of approval after 31 December 2018
9.3.1.12.6 9.3.2.12.6 9.3.3.12.6	Distance of ventilation inlets from cargo area	N.R.M. from 1 January 2003 Renewal of the certificate of approval after 31 December 2044
9.3.1.12.6 9.3.2.12.6 9.3.3.12.6	Permanently installed flame screens	N.R.M. from 1 January 2003 Renewal of the certificate of approval after 31 December 2018
9.3.3.12.7	Approval of flame arresters	N.R.M. Renewal of the certificate of approval after 31 December 2018 for Type N vessels whose keels were laid before 1 January 1977.
9.3.1.13 9.3.3.13	Stability (general)	N.R.M. Renewal of the certificate of approval after 31 December 2044
9.3.3.13.3 paragraph 2	Stability (general)	N.R.M. from 1 January 2007 Renewal of the certificate of approval after 31 December 2044
9.3.1.14 9.3.3.14	Stability (intact)	N.R.M. Renewal of the certificate of approval after 31 December 2044
9.3.2.14.2	Stability (intact)	N.R.M. Renewal of the certificate of approval after 31 December 2044

1.6.7.2.2.2 Table of general transitional provisions: Tank vessels		
Paragraphs	Subject	Time limit and comments
9.3.1.15	Stability (damaged condition)	N.R.M. Renewal of the certificate of approval after 31 December 2044
9.3.3.15	Stability (damaged condition)	N.R.M. after 1 January 2007 Renewal of certificate of approval after 31 December 2044
9.3.1.16.1 9.3.3.16.1	Distance of openings of engine rooms from the cargo area	N.R.M. Renewal of the certificate of approval after 31 December 2044
9.3.3.16.1	Internal combustion engines outside the cargo area	N.R.M. Renewal of the certificate of approval after 31 December 2034 for Type N open vessels
9.3.1.16.2 9.3.3.16.2	Hinges of doors facing the cargo area	N.R.M. Renewal of the certificate of approval after 31 December 2034 for vessels whose keels were laid before 1 January 1977 where alterations would obstruct other major openings.
9.3.3.16.2	Engine rooms accessible from the deck	N.R.M. Renewal of the certificate of approval after 31 December 2034 for Type N open vessels
9.3.1.17.1 9.3.3.17.1	Accommodation and wheelhouse outside the cargo area	N.R.M. Renewal of the certificate of approval after 31 December 2044 for vessels whose keels were laid before 1 January 1977, provided that there is no connection between the wheelhouse and other enclosed spaces. Renewal of the certificate of approval after 31 December 2044 for vessels up to 50 m in length whose keels were laid before 1 January 1977 and whose wheelhouses are located in the cargo area even if it provides access to another enclosed space, provided that safety is ensured by appropriate service requirements of the competent authority.
9.3.3.17.1	Accomodation and wheelhouse outside the cargo area	N.R.M. Renewal of the certificate of approval after 31 December 2044 for Type N open vessels
9.3.1.17.2 9.3.2.17.2 9.3.3.17.2	Arrangement of entrances and openings of forward superstructures	N.R.M. Renewal of the certificate of approval after 31 December 2044
9.3.1.17.2 9.3.2.17.2 9.3.3.17.2	Entrances facing the cargo area	N.R.M. Renewal of the certificate of approval after 31 December 2044 for vessels up to 50 m in length whose keels were laid before 1 January 1977, provided that gas screens are installed.

1.6.7.2.2.2 Table of general transitional provisions: Tank vessels		
Paragraphs	Subject	Time limit and comments
9.3.3.17.2	Entrances and openings	N.R.M. Renewal of the certificate of approval after 31 December 2044 for Type N open vessels
9.3.3.17.3	Entrances and openings must be capable of being closed	N.R.M. Renewal of the certificate of approval after 31 December 2010 for Type N open vessels
9.3.1.17.4 9.3.3.17.4	Distance of openings from the cargo area	N.R.M. Renewal of the certificate of approval after 31 December 2044
9.3.3.17.5 (b), (c)	Approval of shaft passages and displaying of instructions	N.R.M. Renewal of the certificate of approval after 31 December 2018 for Type N open vessels

9.3.1.17.6
9.3.3.17.6
	Pump-room below deck	N.R.M.
		Renewal of the certificate of approval after 31 December 2018
		Until then, the following requirements apply on board vessels in service:
		Pump-rooms below deck shall
		- meet the requirements for service spaces:
		  - for Type G vessels: 9.3.1.12.3
		  - for Type N vessels: 9.3.3.12.3
		- be equipped with a gas detection system referred to in 9.3.1.17.6 or 9.3.3.17.6

9.3.2.20.2 9.3.3.20.2	Intake valve	N.R.M. Renewal of the certificate of approval after 31 December 2018
9.3.3.20.2	Filling of cofferdams with pump	N.R.M. Renewal of the certificate of approval after 31 December 2018 for Type N open vessels
9.3.2.20.2 9.3.3.20.2	Filling of cofferdams within 30 minutes	N.R.M. Renewal of the certificate of approval after 31 December 2018
9.3.3.21.1 (b)	Liquid level gauge	N.R.M. from 1 January 2005 Renewal of the certificate of approval after 31 December 2018 for vessels of Type N open with flame-arrester and those of Type N open Until then, on board vessels in service fitted with gauging openings, such openings shall: - Be arranged so that the degree of filling can be measured using a sounding rod - Be fitted with an automatically-closing cover
9.3.3.21.1 (g)	Sampling opening	N.R.M. Renewal of the certificate of approval after 31 December 2018 for Type N open vessels

1.6.7.2.2.2 Table of general transitional provisions: Tank vessels		
Paragraphs	Subject	Time limit and comments
9.3.1.21.4 9.3.2.21.4 9.3.3.21.4	Liquid-level alarm device independent from the liquid-level gauge	N.R.M. Renewal of the certificate of approval after 31 December 2018
9.3.1.21.5 (a) 9.3.2.21.5 (a) 9.3.3.21.5 (a)	Socket close to the shore connections of the loading and unloading pipes and switching off of vessel's pump	N.R.M. Renewal of the certificate of approval after 31 December 2018
9.3.1.21.5 (b) 9.3.2.21.5 (b) 9.3.3.21.5 (d)	Installation of on-board pump switch-off from the shore	N.R.M. Renewal of the certificate of approval after 31 December 2006
9.3.2.21.5 (c)	Device for rapid shutting off of refuelling	N.R.M. Renewal of the certificate of approval after 31 December 2008
9.3.1.21.7 9.3.2.21.7 9.3.3.21.7	Vacuum or over-pressure alarms in cargo tanks for the carriage of substances without remark 5 in column (20) of Table C of Chapter 3.2	N.R.M. from 1 January 2001 Renewal of the certificate of approval after 31 December 2018
9.3.1.21.7 9.3.2.21.7 9.3.3.21.7	Temperature alarms in cargo tanks	N.R.M. from 1 January 2001 Renewal of the certificate of approval after 31 December 2018
9.3.1.22.1 (b)	Height of cargo tank openings above the deck	N.R.M. Renewal of the certificate of approval after 31 December 2044
9.3.3.22.1 (b)	Cargo tank openings 0.50 m above the deck	N.R.M. Renewal of the certificate of approval after 31 December 2044 for vessels whose keels were laid before 1 January 1977.
9.3.1.22.4	Prevention of spark-formation by closure devices	N.R.M. from 1 January 2003 Renewal of the certificate of approval after 31 December 2018
9.3.1.22.3 9.3.2.22.4 (b) 9.3.3.22.4 (b)	Position of outlets of valves above the deck	N.R.M. Renewal of the certificate of approval after 31 December 2018
9.3.2.22.4 (b) 9.3.3.22.4 (b)	Pressure setting of high velocity vent valves	N.R.M. Renewal of the certificate of approval after 31 December 2018

1.6.7.2.2.2 Table of general transitional provisions: Tank vessels		
Paragraphs	Subject	Time limit and comments
9.3.3.23.2	Test pressure for cargo tanks	N.R.M. Renewal of the certificate of approval after 31 December 2044 for vessels whose keels were laid before 1 January 1977, for which a test pressure of 15 kPa (0.15 bar) is required. Until then, a test pressure of 10 kPa (0.10 bar) shall be sufficient.
9.3.3.23.2	Test pressure for cargo tanks	N.R.M. Renewal of the certificate of approval after 31 December 2044 for oil-separator vessels in service before 1 January 1999. Until then, a test pressure of 5 kPa (0.05 bar) is sufficient.
9.3.3.23.3	Test pressure for pipes for loading and unloading	N.R.M. Renewal of the certificate of approval at the latest by 1 January 2039 for oil-separator vessels in service before 1 January 1999. Until then, a test pressure of 400 kPa (4 bar) is sufficient.
9.3.2.25.1 9.3.3.25.1	Shut-down of cargo pumps	N.R.M. Renewal of the certificate of approval after 31 December 2018
9.3.1.25.1 9.3.2.25.1 9.3.3.25.1	Distance of pumps, etc. from accommodation, etc.	N.R.M. Renewal of the certificate of approval after 31 December 2044
9.3.1.25.2 (d) 9.3.2.25.2 (d)	Position of loading and unloading pipes on deck	N.R.M. Renewal of the certificate of approval after 31 December 2044
9.3.1.25.2 (e) 9.3.2.25.2 (e) 9.3.3.25.2 (e)	Distance of shore connections from accommodation, etc.	N.R.M. Renewal of the certificate of approval after 31 December 2034
9.3.2.25.2 (i)	Pipes for loading and unloading, and vapour pipes, shall not have flexible connections fitted with sliding seals.	N.R.M. from 1 January 2009 Vessels in service having connections with sliding seals may no longer transport substances with toxic or corrosive properties (see column (5) of Table C of Chapter 3.2, hazards 6.1 and 8) following the renewal of the certificate of approval after 31 December 2008. Vessels in service shall not have flexible connections fitted with sliding seals following the renewal of the certificate of approval after 31 December 2018
9.3.3.25.2 (h)	Pipes for loading and unloading, and vapour pipes, shall not have flexible connections fitted with sliding seals	N.R.M. from 1 January 2009 Vessels in service having connections with sliding seals may no longer transport substances with corrosive properties (see column (5) of Table C of Chapter 3.2, hazard 8) following the renewal of the certificate of approval after 31 December 2008. Vessels in service shall not have flexible connections with sliding seals following the renewal of the certificate of approval after 31 December 2018.

1.6.7.2.2.2 Table of general transitional provisions: Tank vessels		
Paragraphs	Subject	Time limit and comments
9.3.2.25.8 (a)	Ballasting suction pipes located within the cargo area but outside the cargo tanks	N.R.M. Renewal of the certificate of approval after 31 December 2018
9.3.2.25.9 9.3.3.25.9	Loading and unloading flow	N.R.M. from 1 January 2003 Renewal of the certificate of approval after 31 December 2018
9.3.3.25.12	9.3.3.25.1 (a) and (c), 9.3.3.25.2 (e), 9.3.3.25.3 and 9.3.3.25.4 (a) are not applicable for Type N open with the exception of Type N open carrying corrosive substances (see Chapter 3.2, Table C, column (5), hazard 8)	N.R.M. Renewal of the certificate of approval after 31 December 2018 This time limit concerns only Type N open vessels carrying corrosive substances (see Chapter 3.2, Table C, column (5), hazard 8).
9.3.1.31.2 9.3.2.31.2 9.3.3.31.2	Distance of engine air intakes from the cargo area	N.R.M. Renewal of the certificate of approval after 31 December 2044
9.3.1.31.4 9.3.2.31.4 9.3.3.31.4	Temperature of outer parts of engines, etc.	N.R.M. Renewal of the certificate of approval after 31 December 2018 Until then, the following requirements apply on board vessels in service: The temperature of outer parts shall not exceed 300 °C.
9.3.1.31.5 9.3.2.31.5 9.3.3.31.5	Temperature in the engine room	N.R.M. Renewal of the certificate of approval after 31 December 2018 Until then, the following requirements apply on board vessels in service: The temperature in the engine room shall not exceed 45 °C.
9.3.1.32.2 9.3.2.32.2 9.3.3.32.2	Openings of air pipes 0.50 m above the deck	N.R.M. Renewal of the certificate of approval after 31 December 2010
9.3.3.34.1	Exhaust pipes	N.R.M. Renewal of the certificate of approval after 31 December 2018
9.3.1.35.1 9.3.3.35.1	Stripping and ballast pumps in the cargo area	N.R.M. Renewal of the certificate of approval after 31 December 2034

1.6.7.2.2.2 Table of general transitional provisions: Tank vessels		
Paragraphs	Subject	Time limit and comments
9.3.3.35.3	Suction pipes for ballasting located within the cargo area but outside the cargo tanks	N.R.M. Renewal of the certificate of approval after 31 December 2018
9.3.1.35.4	Stripping installation of the pump-room outside the pump-room	N.R.M. from 1 January 2003 Renewal of the certificate of approval after 31 December 2018
9.3.1.40.1 9.3.2.40.1 9.3.3.40.1	Fire extinguishing systems, two pumps, etc.	N.R.M. Renewal of the certificate of approval after 31 December 2018
9.3.1.40.2 9.3.2.40.2 9.3.3.40.2	Fixed fire extinguishing system in engine room	N.R.M. Renewal of the certificate of approval after 31 December 2034
9.3.1.41.1 9.3.3.41.1	Outlets of funnels located not less than 2 m from the cargo area	N.R.M. Renewal of the certificate of approval after 31 December 2044 for vessels whose keels were laid before 1 January 1977.
9.3.3.41.1	Outlets of funnels	N.R.M. at the latest by 1 January 2039 for oil-separator vessels
9.3.1.41.2 9.3.2.41.2 9.3.3.41.2 in conjunction with 7.2.3.41	Heating, cooking and refrigerating appliances	N.R.M. Renewal of the certificate of approval after 31 December 2010
9.3.3.42.2	Cargo heating system	N.R.M. Renewal of the certificate of approval after 31 December 2034 for Type N vessels Until then, the following requirements apply on board vessels in service: This can be achieved by an oil separator fitted to the condensed water return pipe.
9.3.1.51.2 9.3.2.51.2 9.3.3.51.2	Visual and audible alarm	N.R.M. Renewal of the certificate of approval after 31 December 2034
9.3.1.51.3 9.3.2.51.3 9.3.3.51.3	Temperature class and explosion group	N.R.M. Renewal of the certificate of approval after 31 December 2034
9.3.3.52.1 (b), (c), (d) and (e)	Electrical installations	N.R.M. Renewal of the certificate of approval after 31 December 2034 for Type N open vessels

1.6.7.2.2.2 Table of general transitional provisions: Tank vessels		
Paragraphs	Subject	Time limit and comments
9.3.1.52.1 (e) 9.3.3.52.1 (e)	Electrical installations of the "certified safe" type in the cargo area	N.R.M. Renewal of the certificate of approval after 31 December 2034 for vessels whose keels were laid before 1 January 1977. Until then, the following conditions shall be met during loading, unloading and gas-freeing on board vessels having non-gastight wheelhouse openings (e.g. doors, windows, etc.) in the cargo area: (a) All electrical installations designed to be used shall be of a limited explosion-risk type, i.e. they shall be so designed that there is no sparking under normal operating conditions and the temperature of their outer surfaces does not rise above 200 °C, or be of a type protected against water spray the temperature of whose outer surfaces does not exceed 200 °C under normal operating conditions; (b) Electrical installations which do not meet the requirements of (a) above shall be marked in red and it shall be possible to switch them off by means of a central switch.
9.3.3.52.2	Accumulators located outside the cargo area	N.R.M. Renewal of the certificate of approval after 31 December 2034 for Type N open vessels
9.3.1.52.3 (a) 9.3.1.52.3 (b) 9.3.3.52.3 (a) 9.3.3.52.3 (b)	Electrical installations used during loading, unloading or gas-freeing	N.R.M. Renewal of the certificate of approval after 31 December 2034 for the following installations on vessels whose keels were laid before 1 January 1977: - Lighting installations in accommodation, with the exception of switches near the entrances to accommodation - Radio telephone installations in accommodation and wheelhouses and combustion engine control appliances Until then, all other electrical installations shall meet the following requirements: (a) Generators, engines, etc. IP13 protection mode; (b) Control panels, lamps, etc. IP23 protection mode; (c) Appliances, etc. IP55 protection mode.
9.3.3.52.3 (a) 9.3.3.52.3 (b)	Electrical installations used during loading, unloading or gas-freeing	N.R.M. Renewal of the certificate of approval after 31 December 2034 for Type N open vessels

1.6.7.2.2.2 Table of general transitional provisions: Tank vessels		
Paragraphs	Subject	Time limit and comments
9.3.1.52.3 (b) 9.3.2.52.3 (b) 9.3.3.52.3 (b) in conjunction with 3 (a)	Electrical installations used during loading, unloading or gas-freeing	N.R.M. Renewal of the certificate of approval after 31 December 2034 Until then, on board vessels in service, paragraph (3) (a) shall not apply to: - Lighting installations in accommodation, with the exception of switches near entrances to accommodation; - Radio telephone installations in accommodation and wheelhouses.
9.3.1.52.4 9.3.2.52.4 9.3.3.52.4 last sentence	Disconnection of such installations from a centralized location	N.R.M. Renewal of the certificate of approval after 31 December 2034
9.3.3.52.4	Red mark on electrical installations	N.R.M. Renewal of the certificate of approval after 31 December 2034 for Type N open vessels
9.3.3.52.5	Shutting down switch for continuously driven generator	N.R.M. Renewal of the certificate of approval after 31 December 2034 for Type N open vessels
9.3.3.52.6	Permanently fitted sockets	N.R.M. Renewal of the certificate of approval after 31 December 2034 for Type N open vessels
9.3.1.56.1 9.3.3.56.1	Metallic sheaths for all cables in the cargo area	N.R.M. Renewal of the certificate of approval after 31 December 2034 for vessels whose keels were laid before 1 January 1977
9.3.3.56.1	Metallic sheath for all cables in the cargo area	N.R.M. by 1 January 2039 at the latest for oil-separator vessels.

1.6.7.2.2.3 Transitional provisions concerning the application of the requirements of Table C of Chapter 3.2 to the carriage of goods in tank vessels.

1.6.7.2.2.3.1 The goods for which Type N closed with a minimum valve setting of 10 kPa (0.10 bar) is required in Table C of Chapter 3.2, may be carried in tank-vessels in service of Type N closed with a minimum valve setting of 6 kPa (0.06 bar) (cargo tank test pressure of 10 kPa (0.10 bar)).

1.6.7.2.2.3.2 (Remark 5)

On board tank vessels in service, the dismantling of the fixed plate stacks of flame arresters is permitted in the event of the carriage of substances for which remark 5 is included in column (20) of Table C of Chapter 3.2. This transitional provision is valid until 31 December 2010.

1.6.7.2.2.3.3 (Remarks 6 and 7)

On board tank vessels in service vapour pipes and pressure/vacuum valves do not need to be heated in the event of the carriage of substances for which remarks 6 or 7 are included in column (20) of Table C of Chapter 3.2. This transitional provision is valid until 30 December 2010.

On board tank vessels equipped with flame arresters with fixed plate stacks, the latter may be dismantled in the event of the carriage of the above-mentioned substances. This transitional provision is valid until 31 December 2010.

1.6.7.3 ***Supplementary transitional provisions applicable to specific inland waterways***

Vessels in service to which the transitional provisions of this subsection are applied shall meet:

– the requirements of paragraphs and subparagraphs mentioned in the table below and in the table of general transitional provisions (see 1.6.7.2.1.1 and 1.6.7.2.3.1) within the period established therein;

– the requirements of paragraphs and subparagraphs not mentioned in the table below or in the table of general transitional provisions at the date of application of these Regulations.

The construction and equipment of vessels in service shall be maintained at least at the previous standard of safety.

Table of supplementary transitional provisions		
Paragraph	Subject	Time limit and comments
9.1.0.11.1 (b)	Holds, common bulkheads with oil fuel tanks	N.R.M. The following requirements apply on board vessels in service: Holds may share a common bulkhead with the oil fuel tanks, provided that the cargo or its packaging does not react chemically with the fuel.
9.1.0.92	Emergency exit	N.R.M. The following requirements apply on board vessels in service: Spaces the entrances or exits of which are partly or fully immersed in damaged condition shall be provided with an emergency exit not less than 0.075 m above the damage waterline.
9.1.0.95.1 (c)	Height of openings above damage waterline	N.R.M. The following requirements apply on board vessels in service: The lower edge of any non-watertight openings (e.g. doors, windows, access hatchways) shall, at the final stage of flooding, be not less than 0.075 m above the damage waterline.

Table of supplementary transitional provisions		
Paragraph	Subject	Time limit and comments
9.1.0.95.2 9.3.2.15.2	Extent of the stability diagram (damaged condition)	N.R.M. The following requirements apply on board vessels in service: At the final stage of flooding the angle of heel shall not exceed: 20° before measures to right the vessel; 12° following measures to right the vessel.
9.3.3.8.1	Classification	N.R.M. Renewal of the certificate of approval after 31 December 2044 for Type N open vessels with flame arresters and Type N open vessels
9.3.1.11.1 (a) 9.3.2.11.1 (a) 9.3.3.11.1 (a)	Maximum capacity of cargo tanks	N.R.M. The following requirements apply on board vessels in service: The maximum permissible capacity of a cargo tank shall be 760 m^3.
9.3.2.11.1 (d)	Length of cargo tanks	N.R.M. The following requirements apply on board vessels in service: The length of a cargo tank may exceed 10 m and 0.2 L.
9.3.1.12.3 9.3.2.12.3 9.3.3.12.3	Position of air inlets	N.R.M. The following requirements apply on board vessels in service: The air inlets to be positioned at least 5.00 m from the safety-valve outlets
9.3.2.15.1 (c)	Height of openings above damage waterline	N.R.M. The following requirements apply on board vessels in service: The lower edge of any non-watertight openings (e.g. doors, windows, access hatchways) shall, at the final stage of flooding, be not less than 0.075 m above the damage waterline.
9.3.2.20.2 9.3.3.20.2	Filling of cofferdams with water	N.R.M. The following requirements apply on board vessels in service: Cofferdams shall be fitted with a system for filling with water or inert gas.

Table of supplementary transitional provisions		
Paragraph	Subject	Time limit and comments
9.3.1.92 9.3.2.92	Emergency Exit	N.R.M. The following requirements apply on board vessels in service: Spaces the entrances or exits of which are partly or fully immersed in damaged condition shall be provided with an emergency exit not less than 0.075 m above the damage waterline.

1.6.7.4 ***Transitional provisions concerning the transport of substances hazardous to the environment or to health***

1.6.7.4.1 *Transitional provisions: vessels*

Single-hull tank vessels in service on 1 January 2009 with a dead weight on 1 January 2007 of less than 1,000 tonnes may continue to transport the substances they were authorized to carry on 31 December 2008 until 31 December 2018.

Supply vessels and oil separator vessels in service on 1 January 2009 with a dead weight on 1 January 2007 of less than 300 tonnes may continue to transport the substances they were authorized to carry on 31 December 2008 until 31 December 2038.

1.6.7.4.2 *Transitional periods applicable to substances*

By way of derogation from Part 3, Table C, the substances listed below may be transported in accordance with the requirements referred to in the following tables until the date specified.

1. Until 31.12.2012

UN No. or substance identification No.	Name and description	Class	Classification code	Packing group	Dangers	Type of tank vessel	Cargo tank design	Cargo tank type	Cargo tank equipment	Opening pressure of the high-velocity vent valve in kPa	Maximum degree of filling in %	Relative density at 20 °C	Type of sampling device	Pump room below deck permitted	Temperature class	Explosion group	Anti-explosion protection required	Equipment required	Number of blue cones/lights	Additional requirements/Remarks
(1)	(2)	(3a)	(3b)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
1145	CYCLOHEXANE	3	F1	II	3+N1	N	2	2		10	97	0.78	3	yes	T3	II A	yes	PP, EX, A	1	6: +11 ºC; 17
1146	CYCLOPENTANE	3	F1	II	3+N2	N	2	2		10	97	0.75	3	yes	T2	II A	yes	PP, EX, A	1	
1157	DIISOBUTYL KETONE	3	F1	III	3+N3+F	N	3	2			97	0.81	3	yes	T4 [3)]	II B[4)]	yes	PP, EX, A	0	
1159	DIISOPROPYL ETHER	3	F1	II	3+N2	N	2	2		10	97	0.72	3	yes	T2	II A	yes	PP, EX, A	1	
1171	ETHYLENE GLYCOL MONOETHYL ETHER	3	F1	III	3+CMR	N	3	2			97	0.93	3	yes	T3	II B	yes	PP, EX, A	0	
1172	ETHYLENE GLYCOL MONOETHYL ETHER ACETATE	3	F1	III	3+N3+CMR	N	3	2			97	0.98	3	yes	T2	II A	yes	PP, EX, A	0	
1188	ETHYLENE GLYCOL MONOMETHYL ETHER	3	F1	III	3+CMR	N	3	2			97	0.97	3	yes	T3	II B	yes	PP, EX, A	0	
1191	OCTYL ALDEHYDES (2- ETHYLOCTALDEHYDE)	3	F1	III	3+N3+F	N	3	2			97	0.82	3	yes	T3	II B[4)]	yes	PP, EX, A	0	
1206	HEPTANES (n- HEPTANE)	3	F1	II	3+N1	N	2	2		10	97	0.68	3	yes	T3	II A	yes	PP, EX, A	1	
1208	HEXANES (n- HEXANE)	3	F1	II	3+N1	N	2	2		10	97	0.66	3	yes	T3	II A	yes	PP, EX, A	1	
1216	ISOOCTENE	3	F1	II	3+N2	N	2	2		10	97	0.73	3	yes	T3	II B[4)]	yes	PP, EX, A	1	
1224	KETONES, LIQUID, N.O.S. 110 kPa < vp50 ≤ 175 kPa	3	F1	II	3+(N1, N2, N3, CMR, F or S)	N	2	2		50	97		3	yes	T4 [3)]	II B[4)]	yes	PP, EX, A	1	14; 27; 29
1224	KETONES, LIQUID, N.O.S. 110 kPa < vp50 ≤ 175 kPa	3	F1	II	3+(N1, N2, N3, CMR, F or S)	N	2	2	3	10	97		3	yes	T4 [3)]	II B[4)]	yes	PP, EX, A	1	14; 27; 29

UN No. or substance identification No.	Name and description	Class	Classification code	Packing group	Dangers	Type of tank vessel	Cargo tank design	Cargo tank type	Cargo tank equipment	Opening pressure of the high-velocity vent valve in kPa	Maximum degree of filling in %	Relative density at 20 °C	Type of sampling device	Pump room below deck permitted	Temperature class	Explosion group	Anti-explosion protection required	Equipment required	Number of blue cones/lights	Additional requirements/Remarks
(1)	(2)	(3a)	(3b)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
1224	KETONES, LIQUID, N.O.S. vp50 ≤ 110 kPa	3	F1	II	3+(N1, N2, N3, CMR, F or S)	N	2	2		10	97		3	yes	T4 [3)]	II B[4)]	yes	PP, EX, A	1	14; 27; 29
1224	KETONES, LIQUID, N.O.S.	3	F1	III	3+(N1, N2, N3, CMR, F or S)	N	3	2			97		3	yes	T4 [3)]	II B[4)]	yes	PP, EX, A	0	14; 27
1262	OCTANES (n-OCTANE)	3	F1	II	3+N1	N	2	2		10	97	0.7	3	yes	T3	II A	yes	PP, EX, A	1	
1265	PENTANES, liquid (n-PENTANE)	3	F1	II	3+N2	N	2	2		50	97	0.63	3	yes	T3	II A	yes	PP, EX, A	1	
1265	PENTANES, liquid (n-PENTANE)	3	F1	II	3+N2	N	2	2	3	10	97	0.63	3	yes	T3	II A	yes	PP, EX, A	1	
1267	PETROLEUM CRUDE OIL vp50 > 175 kPa	3	F1	I	3+(N1, N2, N3, CMR, F or S)	N	1	1			97		1	yes	T4 [3)]	II B[4)]	yes	PP, EX, A	1	14; 29
1267	PETROLEUM CRUDE OIL vp50 > 175 kPa	3	F1	I	3+(N1, N2, N3, CMR, F or S)	N	2	2	1	50	97		2	yes	T4 [3)]	II B[4)]	yes	PP, EX, A	1	14; 29
1267	PETROLEUM CRUDE OIL 110 kPa < vp50 ≤ 175 kPa	3	F1	II	3+(N1, N2, N3, CMR, F or S)	N	2	2		50	97		3	yes	T4 [3)]	II B[4)]	yes	PP, EX, A	1	14; 29
1267	PETROLEUM CRUDE OIL 110 kPa < vp50 ≤ 150 kPa	3	F1	II	3+(N1, N2, N3, CMR, F or S)	N	2	2	3	10	97		3	yes	T4 [3)]	II B[4)]	yes	PP, EX, A	1	14; 29
1267	PETROLEUM CRUDE OIL vp50 ≤ 110 kPa	3	F1	I	3+(N1, N2, N3, CMR, F or S)	N	2	2		10	97		3	yes	T4 [3)]	II B[4)]	yes	PP, EX, A	1	14; 29

(Until 31.12.2012)

UN No. or substance identification No.	Name and description	Class	Classification code	Packing group	Dangers	Type of tank vessel	Cargo tank design	Cargo tank type	Cargo tank equipment	Opening pressure of the high-velocity vent valve in kPa	Maximum degree of filling in %	Relative density at 20 °C	Type of sampling device	Pump room below deck permitted	Temperature class	Explosion group	Anti-explosion protection required	Equipment required	Number of blue cones/lights	Additional requirements/Remarks
(1)	(2)	(3a)	(3b)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
1267	PETROLEUM CRUDE OIL vp50 ≤ 110 kPa	3	F1	II	3+(N1, N2, N3, CMR, F or S)	N	2	2		10	97		3	yes	T4 [3]	II B[4]	yes	PP, EX, A	1	14; 29
1267	PETROLEUM CRUDE OIL	3	F1	III	3+(N1, N2, N3, CMR, F or S)	N	3	2			97		3	yes	T4 [3]	II B[4]	yes	PP, EX, A	0	14
1307	XYLENES (o-XYLENE)	3	F1	III	3+N2	N	3	2			97	0.88	3	yes	T1	II A	yes	PP, EX, A	0	
1307	XYLENES (m-XYLENE)	3	F1	III	3+N2	N	3	2			97	0.86	3	yes	T1	II A	yes	PP, EX, A	0	
1307	XYLENES (p-XYLENE)	3	F1	III	3+N2	N	3	2	2		97	0.86	3	yes	T1	II A	yes	PP, EX, A	0	6: +17 ºC; 17
1307	XYLENES (mixture with boiling point ≤ 0° C)	3	F1	II	3+N2	N	3	2			97		3	yes	T1	II A	yes	PP, EX, A	1	
1307	XYLENES (mixture with boiling point ≤ 0° C)	3	F1	III	3+N2	N	3	2			97		3	yes	T1	II A	yes	PP, EX, A	0	
1307	XYLENES (mixture with 0° C < boiling point < 13° C)	3	F1	I	3+N2	N	3	2	2		97		3	yes	T1	II A	yes	PP, EX, A	0	6: +17 ºC; 17
1719	CAUSTIC ALKALI LIQUID, N.O.S.	8	C5	II	8+(N1, N2, N3, CMR, F or S)	N	4	2			97		3	yes			no	PP, EP	0	27; 30; 34
1719	CAUSTIC ALKALI LIQUID, N.O.S.	8	C5	III	8+(N1, N2, N3, CMR, F or S)	N	4	2			97		3	yes			no	PP, EP	0	27; 30; 34
1760	CORROSIVE LIQUID, N.O.S.	8	C9	I	8+(N1, N2, N3, CMR, F or S)	N	2	3		10	97		3	yes			no	PP, EP	0	27; 34
1760	CORROSIVE LIQUID, N.O.S.	8	C9	II	8+(N1, N2, N3, CMR, F or S)	N	2	3		10	97		3	yes			no	PP, EP	0	27; 34

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UN No. or substance identification No.	Name and description	Class	Classification code	Packing group	Dangers	Type of tank vessel	Cargo tank design	Cargo tank type	Cargo tank equipment	Opening pressure of the high-velocity vent valve in kPa	Maximum degree of filling in %	Relative density at 20 °C	Type of sampling device	Pump room below deck permitted	Temperature class	Explosion group	Anti-explosion protection required	Equipment required	Number of blue cones/lights	Additional requirements/Remarks
(1)	(2)	(3a)	(3b)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
1760	CORROSIVE LIQUID, N.O.S.	8	C9	III	8+(N1, N2, N3, CMR, F or S)	N	4	3			97		3	yes			no	PP, EP	0	27; 34
1760	CORROSIVE LIQUID, N.O.S. (SODIUM MERCAPTO-BENZOTHIAZOLE, 50 % AQUEOUS SOLUTION)	8	C9	II	8+N1+S	N	4	2			97	1.25	3	yes			no	PP, EP	0	34
1760	CORROSIVE LIQUID, N.O.S. (FATTY ALCOHOL, C_{12}-C_{14})	8	C9	III	8+F	N	4	2			97	0.89	3	yes			no	PP, EP	0	34
1764	DICHLOROACETIC ACID	8	C3	II	8+N1	N	3	3			97	1.56	3	yes	T1	II A	yes	PP, EP, EX, A	0	17; 34
1918	ISOPROPYLBENZENE (cumene)	3	F1	III	3+N2	N	3	2			97	0.86	3	yes	T2	II A[8)]	yes	PP, EX, A	0	
1920	NONANES	3	F1	III	3+N2+F	N	3	2			97	0,70 - 0,75	3	yes	T3	II A	yes	PP, EX, A	0	
1987	ALCOHOLS, N.O.S. 110 kPa < vp50 ≤ 175 kPa	3	F1	II	3+(N1, N2, N3, CMR, F or S)	N	2	2		50	97		3	yes	T4 [3)]	II B[4)]	yes	PP, EX, A	1	14; 27; 29
1987	ALCOHOLS, N.O.S. 110 kPa < vp50 ≤ 150 kPa	3	F1	II	3+(N1, N2, N3, CMR, F or S)	N	2	2	3	10	97		3	yes	T4 [3)]	II B[4)]	yes	PP, EX, A	1	14; 27; 29
1987	ALCOHOLS, N.O.S. vp50 ≤ 110 kPa	3	F1	II	3+(N1, N2, N3, CMR, F or S)	N	2	2		10	97		3	yes	T4 [3)]	II B[4)]	yes	PP, EX, A	1	14; 27; 29
1987	ALCOHOLS, N.O.S.	3	F1	III	3+(N1, N2, N3, CMR, F or S)	N	3	2			97		3	yes	T4 [3)]	II B[4)]	yes	PP, EX, A	0	14; 27

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(1)	(2)	(3a)	(3b)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
1987	ALCOHOLS, N.O.S. (CYCLOHEXANOL)	3	F1	III	3+N3+F	N	3	2	2		95	0.95	3	yes	T3	II A	yes	PP, EX, A	0	7; 17
1989	ALDEHYDES, N.O.S. 110 kPa < vp50 ≤ 175 kPa	3	F1	II	3+(N1, N2, N3, CMR, F or S)	N	2	2		50	97		3	yes	T4 [3)]	II B[4)]	yes	PP, EX, A	1	14; 27; 29
1989	ALDEHYDES, N.O.S. 110 kPa < vp50 ≤ 150 kPa	3	F1	II	3+(N1, N2, N3, CMR, F or S)	N	2	2	3	10	97		3	yes	T4 [3)]	II B[4)]	yes	PP, EX, A	0	14; 27; 29
1989	ALDEHYDES, N.O.S. 110 kPa < vp50	3	F1	II	3+(N1, N2, N3, CMR, F or S)	N	2	2		10	97		3	yes	T4 [3)]	II B[4)]	yes	PP, EX, A	0	14; 27; 29
1989	ALDEHYDES, N.O.S. 110 kPa < vp50 ≤ 175 kPa	3	F1	III	3+(N1, N2, N3, CMR, F or S)	N	3	2			97		3	yes	T4 [3)]	II B[4)]	yes	PP, EX, A	0	14; 27
1993	FLAMMABLE LIQUID, N.O.S. vp50 >175 kPa	3	F1	I	3+(N1, N2, N3, CMR, F or S)	N	1	1			97		1	yes	T4 [3)]	II B[4)]	yes	PP, EX, A	1	14; 27; 29
1993	FLAMMABLE LIQUID, N.O.S. vp50 >175 kPa	3	F1	I	3+(N1, N2, N3, CMR, F or S)	N	2	2	1	50	97		2	yes	T4 [3)]	II B[4)]	yes	PP, EX, A	1	14; 27; 29
1993	FLAMMABLE LIQUID, N.O.S. 110 kPa < vp50 ≤ 175 kPa	3	F1	I	3+(N1, N2, N3, CMR, F or S)	N	2	2		50	97		3	yes	T4 [3)]	II B[4)]	yes	PP, EX, A	1	14; 27; 29
1993	FLAMMABLE LIQUID, N.O.S. 110 kPa < vp50 ≤ 175 kPa	3	F1	II	3+(N1, N2, N3, CMR, F or S)	N	2	2		50	97		3	yes	T4 [3)]	II B[4)]	yes	PP, EX, A	1	14; 27; 29
1993	FLAMMABLE LIQUID, N.O.S. 110 kPa < vp50 ≤ 150 kPa	3	F1	I	3+(N1, N2, N3, CMR, F or S)	N	2	2	3	10	97		3	yes	T4 [3)]	II B[4)]	yes	PP, EX, A	1	14; 27; 29

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(1)	(2)	(3a)	(3b)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
1993	FLAMMABLE LIQUID, N.O.S. 110 kPa < vp50 ≤ 150 kPa	3	F1	II	3+(N1, N2, N3, CMR, F or S)	N	2	2	3	10	97		3	yes	T4 [3)]	II B[4)]	yes	PP, EX, A	1	14; 27; 29
1993	FLAMMABLE LIQUID, N.O.S. vp50 ≤ 110 kPa	3	F1	II	3+(N1, N2, N3, CMR, F or S)	N	2	2		10	97		3	yes	T4 [3)]	II B[4)]	yes	PP, EX, A	1	14; 27; 29
1993	FLAMMABLE LIQUID, N.O.S.	3	F1	III	3+(N1, N2, N3, CMR, F or S)	N	3	2			97		3	yes	T4 [3)]	II B[4)]	yes	PP, EX, A	0	14; 27
1993	FLAMMABLE LIQUID, N.O.S. (CYCLOHEXANONE/ CYCLOHEXANOL MIXTURE)	3	F1	III	3+F	N	3	2			97	0.95	3	yes	T3	II A	yes	PP, EX, A	0	
1999	TARS, LIQUID, including road oils, and cutback bitumens	3	F1	III	3+S	N	4	2	2		97		3	yes	T3	II A[7)]	yes	PP, EX, A	0	
2046	CYMENES	3	F1	III	3+N2+F	N	3	2			97	0.88	3	yes	T2	II A	yes	PP, EX, A	0	
2048	DICYCLOPENTADIENE	3	F1	III	3+N2+F	N	3	2	2		95	0.94	3	yes	T1	II B[4)]	yes	PP, EX, A	0	7; 17
2050	DIISOBUTYLENE, ISOMERIC COMPOUNDS	3	F1	II	3+N2+F	N	2	2		10	97	0.72	3	yes	T3[2)]	II A[7)]	yes	PP, EX, A	1	
2241	CYCLOHEPTANE	3	F1	II	3+N2	N	2	2		10	97	0.81	3	yes	T4 [3)]	II A	yes	PP, EX, A	1	
2247	n-DECANE	3	F1	III	3+F	N	3	2			97	0.73	3	yes	T4	II A	yes	PP, EX, A	0	
2259	TRIETHYLENETETRAMINE	8	C7	II	8+N2	N	3	2			97	0.98	3	yes	T2	II B[4)]	yes	PP, EP, EX, A	1	34
2264	N,N-DIMETHYLCYCLO-HEXYLAMINE	8	CF1	II	8+3+N2	N	3	2			97	0.85	3	yes	T3	II B[4)]	yes	PP, EP, EX, A	1	34
2265	N,N-DIMETHYL-FORMAMIDE	3	F1	III	3+CMR	N	3	2			97	0.95	3	yes	T2	II A	yes	PP, EX, A	0	

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(1)	(2)	(3a)	(3b)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
2286	PENTAMETHYLHEPTANE	3	F1	III	3+F	N	3	2			97	0.75	3	yes	T2	II A[7)]	yes	PP, EX, A	0	
2289	ISOPHORONEDIAMINE	8	C7	III	8+N2	N	3	2			97	0.92	3	yes	T2	II A	yes	PP, EP, EX, A	0	17; 34
2303	ISOPROPENYLBENZENE	3	F1	III	3+N2+F	N	3	2			97	0.91	3	yes	T2	II B	yes	PP, EX, A	0	
2309	OCTADIENE (1,7- OCTADIENE)	3	F1	II	3+N2	N	2	2		10	97	0.75	3	yes	T3	II B[4)]	yes	PP, EX, A	1	
2320	TETRAETHYLENE-PENTAMINE	8	C7	III	8+N2	N	4	2			97	1	3	yes			no	PP, EP	0	34
2324	TRIISOBUTYLENE	3	F1	III	3+N1+F	N	3	2			97	0.76	3	yes	T2	II B[4)]	yes	PP, EX, A	0	
2325	1,3,5-TRIMETHYLBENZENE	3	F1	III	3+N1	N	3	2			97	0.87	3	yes	T1	II A	yes	PP, EX, A	0	
2414	THIOPHENE	3	F1	II	3+N3+S	N	2	2		10	97	1.06	3	yes	T2	II A	yes	PP, EX, A	1	
2430	ALKYLPHENOLS, SOLID, N.O.S. (nonylphenol, isomeric mixture, molten)	8	C4	II	8+N1+F	N	3	3	2		95	0.95	3	yes	T2	II A[7)]	yes	PP, EP, EX, A	0	7; 17; 34
2564	TRICHLOROACETIC ACID SOLUTION	8	C3	II	8+N1	N	3	3	2		95	1,62[11)]	3	yes	T1	II A[7)]	yes	PP, EP, EX, A	0	7; 17; 22; 34
2564	TRICHLOROACETIC ACID SOLUTION	8	C3	III	8+N1	N	4	3			97	1,62[11)]	3	yes	T1	II A[7)]	yes	PP, EP, EX, A	0	22; 34
2672	AMMONIA SOLUTION (relative density between 0.880 and 0.957 at 15 °C in water, with more than 10 % but not more than 35 % ammonia)	8	C5	III	8+N1	N	2	2		10	97	0,88[10)] - 0,96[10)]	3	yes			no	PP, EP	0	34
2709	BUTYLBENZENES	3	F1	III	3+N1+F	N	3	2			97	0.87	3	yes	T2	II A	yes	PP, EX, A	0	

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(1)	(2)	(3a)	(3b)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
2735	AMINES, LIQUID, CORROSIVE, N.O.S. or POLYAMINES, LIQUID, CORROSIVE, N.O.S.	8	C7	I	8+(N1, N2, N3, CMR, F or S)	N	4	2			97		3	yes			no	PP, EP	0	27; 34
2735	AMINES, LIQUID, CORROSIVE, N.O.S. or POLYAMINES, LIQUID, CORROSIVE, N.O.S.	8	C7	II	8+(N1, N2, N3, CMR, F or S)	N	4	2			97		3	yes			no	PP, EP	0	27; 34
2735	AMINES, LIQUID, CORROSIVE, N.O.S. or POLYAMINES, LIQUID, CORROSIVE, N.O.S.	8	C7	III	8+(N1, N2, N3, CMR, F or S)	N	4	2			97		3	yes			no	PP, EP	0	27; 34
2815	N-AMINOETHYL-PIPERAZINE	8	C7	III	8+N2	N	4	2			97	0.98	3	yes			no	PP, EP	0	34
2850	PROPYLENE TETRAMER	3	F1	III	3+N1+F	N	4	2			97	0.76	3	yes			no	PP	0	
2924	FLAMMABLE LIQUID, CORROSIVE, N.O.S.	3	FC	III	3+8+(N1, N2, N3, CMR, F or S)	N	3	2			97		3	yes	T4 [3]	II B[4]	yes	PP, EP, EX, A	0	27; 34
3256	ELEVATED TEMPERATURE LIQUID, FLAMMABLE, N.O.S. with flash-point above 60 °C, at or above its flash-point	3	F2	III	3+8+(N1, N2, N3, CMR, F or S)	N	3	2	2		95		3	yes	T4 [3]	II B[4]	yes	PP, EX, A	0	7; 27
3256	ELEVATED TEMPERATURE LIQUID, FLAMMABLE, N.O.S. with flash-point above 60 °C, at or above its flash-point (CARBON BLACK REEDSTOCK) (PYROLYSIS OIL)	3	F2	III	3+F	N	3	2	2		95		3	yes	T 1	II B	yes	PP, EX, A	0	7

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(1)	(2)	(3a)	(3b)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
3256	ELEVATED TEMPERATURE LIQUID, FLAMMABLE, N.O.S. with flash-point above 60 °C, at or above its flash-point (PYROLYSIS OIL A)	3	F2	III	3+F	N	3	2	2		95		3	yes	T 1	II B	yes	PP, EX, A	0	7
3256	ELEVATED TEMPERATURE LIQUID, FLAMMABLE, N.O.S. with flash-point above 60 °C, at or above its flash-point (RESIDUAL OIL)	3	F2	III	3+F	N	3	2	2		95		3	yes	T 1	II B	yes	PP, EX, A	0	7
3256	ELEVATED TEMPERATURE LIQUID, FLAMMABLE, N.O.S. with flash-point above 60 °C, at or above its flash-point (MIXTURE OF CRUDE NAPHTHALINE)	3	F2	III	3+F	N	3	2	2		95		3	yes	T 1	II B	yes	PP, EX, A	0	7
3256	ELEVATED TEMPERATURE LIQUID, FLAMMABLE, N.O.S. with flash-point above 60 °C, at or above its flash-point (CREOSOTE OIL)	3	F2	III	3+N2+ CMR+5	N	3	2	2		95		3	yes	T 2	II B	yes	PP, EX, A	0	7
3264	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.	8	C1	I	8+(N1, N2, N3, CMR, F or S)	N	2	3		10	97		3	yes			no	PP, EP	0	27; 34
3264	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.	8	C1	II	8+(N1, N2, N3, CMR, F or S)	N	2	3		10	97		3	yes			no	PP, EP	0	27; 34
3264	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.	8	C1	III	8+(N1, N2, N3, CMR, F or S)	N	4	3			97		3	yes			no	PP, EP	0	27; 34

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(1)	(2)	(3a)	(3b)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
3265	CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.	8	C3	I	8+(N1, N2, N3, CMR, F or S)	N	2	3		10	97		3	yes			no	PP, EP	0	27; 34
3265	CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.	8	C3	II	8+(N1, N2, N3, CMR, F or S)	N	2	3		10	97		3	yes			no	PP, EP	0	27; 34
3265	CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.	8	C3	III	8+(N1, N2, N3, CMR, F or S)	N	4	3			97		3	yes			no	PP, EP	0	27; 34
3266	CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S.	8	C5	I	8+(N1, N2, N3, CMR, F or S)	N	4	2			97		3	yes			no	PP, EP	0	27; 34
3266	CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S.	8	C5	II	8+(N1, N2, N3, CMR, F or S)	N	4	2			97		3	yes			no	PP, EP	0	27; 34
3266	CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S.	8	C5	III	8+(N1, N2, N3, CMR, F or S)	N	4	2			97		3	yes			no	PP, EP	0	27; 34
3267	CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S.	8	C7	I	8+(N1, N2, N3, CMR, F or S)	N	4	2			97		3	yes			no	PP, EP	0	27; 34
3267	CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S.	8	C7	II	8+(N1, N2, N3, CMR, F or S)	N	4	2			97		3	yes			no	PP, EP	0	27; 34
3267	CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S.	8	C7	III	8+(N1, N2, N3, CMR, F or S)	N	4	2			97		3	yes			no	PP, EP	0	27; 34

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(1)	(2)	(3a)	(3b)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
3271	ETHERS, N.O.S. vp50 ≤ 110 kPa	3	F1	II	3+(N1, N2, N3, CMR, F or S)	N	2	2		10	97		3	yes	T4 [3)]	II B[4)]	yes	PP, EX, A	1	14, 27; 29
3271	ETHERS, N.O.S. (tert-AMYLMETHYL ETHER)	3	F1	II	3+N1	N	2	2		10	97	0.77	3	yes	T2	II B[4)]	yes	PP, EX, A	1	
3271	ETHERS, N.O.S.	3	F1	III	3+(N1, N2, N3, CMR, F or S)	N	3	2			97		3	yes	T4 [3)]	II B[4)]	yes	PP, EX, A	0	14, 27
3272	ESTERS, N.O.S. vp50 ≤ 110 kPa	3	F1	II	3+(N1, N2, N3, CMR, F or S)	N	2	2		10	97	0.77	3	yes	T2	II B[4)]	yes	PP, EX, A	1	14, 27; 29
3272	ESTERS, N.O.S.	3	F1	III	3+(N1, N2, N3, CMR, F or S)	N	3	2			97		3	yes	T4 [3)]	II B[4)]	yes	PP, EX, A	0	14, 27
9001	SUBSTANCES WITH A FLASH-POINT ABOVE 60 °C handed over for carriage or carried at a TEMPERATURE WITHIN A RANGE OF 15 K BELOW THEIR FLASH-POINT or SUBSTANCES WITH A FLASH-POINT > 60 °C, HEATED TO LESS THAN 15 K FROM THE FLASH-POINT	3	F3		3+ (N1, N2, N3, CMR, F or S)	N	3	2			97		3	yes	T4 [3)]	II B[4)]	yes	PP, EX, A	0	27

(Until 31.12.2012)

UN No. or substance identification No.	Name and description	Class	Classification code	Packing group	Dangers	Type of tank vessel	Cargo tank design	Cargo tank type	Cargo tank equipment	Opening pressure of the high-velocity vent valve in kPa	Maximum degree of filling in %	Relative density at 20 °C	Type of sampling device	Pump room below deck permitted	Temperature class	Explosion group	Anti-explosion protection required	Equipment required	Number of blue cones/lights	Additional requirements/Remarks
(1)	(2)	(3a)	(3b)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
9003	SUBSTANCES WITH A FLASH-POINT ABOVE 60 °C BUT NOT MORE THAN 100 °C or SUBSTANCES WHERE 61° C < FLASH‑ POINT ≤ 100° C, which are not affected to another class	9			9+(N3+F)	N	4	2			97		3	yes			no	PP	0	27
9003	SUBSTANCES WITH A FLASH-POINT ABOVE 60 °C BUT NOT MORE THAN 100 °C or SUBSTANCES WHERE 61° C <°FLASH‑ POINT ≤ 100 °C, which are not affected to another class (ETHYLENE GLYCOL MONOBUTYL ETHER)	9			9+(N3+F)	N	4	2			97	0.9	3	yes			no	PP	0	
9003	SUBSTANCES WITH A FLASH-POINT ABOVE 60 °C BUT NOT MORE THAN 100 °C or SUBSTANCES WHERE 61° C <°FLASH‑ POINT ≤ 100 °C, which are not affected to another class (2-ETHYL-HEXYLACRYLATE)	9			9+(N3+F)	N	4	2			97	0.89	3	yes			no	PP	0	3; 5; 16
9005	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S, MOLTEN	9			9+(N2, N3, CMR, F or S)	free														

(Until 31.12.2012)

UN No. or substance identification No.	Name and description	Class	Classification code	Packing group	Dangers	Type of tank vessel	Cargo tank design	Cargo tank type	Cargo tank equipment	Opening pressure of the high-velocity vent valve in kPa	Maximum degree of filling in %	Relative density at 20 °C	Type of sampling device	Pump room below deck permitted	Temperature class	Explosion group	Anti-explosion protection required	Equipment required	Number of blue cones/lights	Additional requirements/Remarks
(1)	(2)	(3a)	(3b)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
9006	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.	9			9+(N2, N3, CMR, F or S)	free														

(Until 31.12.2012)

2. Until 31.12.2015

UN No. or substance identification No.	Name and description	Class	Classification code	Packing group	Dangers	Type of tank vessel	Cargo tank design	Cargo tank type	Cargo tank equipment	Opening pressure of the high-velocity vent valve in kPa	Maximum degree of filling in %	Relative density at 20 °C	Type of sampling device	Pump room below deck permitted	Temperature class	Explosion group	Anti-explosion protection required	Equipment required	Number of blue cones/lights	Additional requirements/Remarks
(1)	(2)	(3a)	(3b)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
1203	MOTOR SPIRIT or GASOLINE or PETROL	3	F1	II	3+N2+ CMR+F	N	2	2		10	97	0,68 - 0,72 10)	3	yes	T3	II A	yes	PP, EX, A	1	14
1268	PETROLEUM DISTILLATES, N.O.S. or PETROLEUM PRODUCTS, N.O.S. vp50 > 175 kPa	3	F1	I	3+(N1, N2, N3, CMR, F or S)	N	1	1			97		1	yes	T4 [3)]	II B[4)]	yes	PP, EX, A	1	14; 27; 29
1268	PETROLEUM DISTILLATES, N.O.S. or PETROLEUM PRODUCTS, N.O.S. vp50 > 175 kPa	3	F1	I	3+(N1, N2, N3, CMR, F or S)	N	2	2	1	50	97		2	yes	T4 [3)]	II B[4)]	yes	PP, EX, A	1	14; 27; 29
1268	PETROLEUM DISTILLATES, N.O.S. or PETROLEUM PRODUCTS, N.O.S. 110 kPa < vp50 ≤ 175 kPa	3	F1	I	3+(N1, N2, N3, CMR, F or S)	N	2	2		50	97		3	yes	T4 [3)]	II B[4)]	yes	PP, EX, A	1	14; 27; 29
1268	PETROLEUM DISTILLATES, N.O.S. or PETROLEUM PRODUCTS, N.O.S. 110 kPa < vp50 ≤ 175 kPa	3	F1	I	3+(N1, N2, N3, CMR, F or S)	N	2	2	3	10	97		3	yes	T4 [3)]	II B[4)]	yes	PP, EX, A	1	14; 27; 29
1268	PETROLEUM DISTILLATES, N.O.S. or PETROLEUM PRODUCTS, N.O.S. 110 kPa < vp50 ≤ 175 kPa	3	F1	II	3+(N1, N2, N3, CMR, F or S)	N	2	2		50	97		3	yes	T4 [3)]	II B[4)]	yes	PP, EX, A	1	14; 27; 29

UN No. or substance identification No.	Name and description	Class	Classification code	Packing group	Dangers	Type of tank vessel	Cargo tank design	Cargo tank type	Cargo tank equipment	Opening pressure of the high-velocity vent valve in kPa	Maximum degree of filling in %	Relative density at 20 °C	Type of sampling device	Pump room below deck permitted	Temperature class	Explosion group	Anti-explosion protection required	Equipment required	Number of blue cones/lights	Additional requirements/Remarks
(1)	(2)	(3a)	(3b)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
1268	PETROLEUM DISTILLATES, N.O.S. or PETROLEUM PRODUCTS, N.O.S. 110 kPa < vp50 ≤ 150 kPa	3	F1	II	3+(N1, N2, N3, CMR, F or S)	N	2	2	3	10	97		3	yes	T4 [3)]	II B[4)]	yes	PP, EX, A	1	14; 27; 29
1268	PETROLEUM DISTILLATES, N.O.S. or PETROLEUM PRODUCTS, N.O.S. vp50 ≤ 110 kPa	3	F1	I	3+(N1, N2, N3, CMR, F or S)	N	2	2		10	97		3	yes	T4 [3)]	II B[4)]	yes	PP, EX, A	1	14; 27; 29
1268	PETROLEUM DISTILLATES, N.O.S. or PETROLEUM PRODUCTS, N.O.S. vp50 ≤ 110 kPa	3	F1	II	3+(N1, N2, N3, CMR, F or S)	N	2	2		10	97		3	yes	T4 [3)]	II B[4)]	yes	PP, EX, A	1	14; 27; 29
1268	PETROLEUM DISTILLATES, N.O.S. or PETROLEUM PRODUCTS, N.O.S.	3	F1	III	3+(N1, N2, N3, CMR, F or S)	N	3	2			97		3	yes	T4 [3)]	II B[4)]	yes	PP, EX, A	0	14; 27
1268	PETROLEUM DISTILLATES; N.O.S or PETROLEUM PRODUCTS, N.O.S. (naphtha) 110 kPa < vp50 ≤ 150 kPa	3	F1	II	3+N2+ CMR+F	N	2	2		50	97	0.735	3	yes	T3	II A	yes	PP, EX, A	1	14; 27; 29
1268	PETROLEUM DISTILLATES; N.O.S or PETROLEUM PRODUCTS, N.O.S. (naphtha) 110 kPa < vp50 ≤ 150 kPa	3	F1	II	3+N2+ CMR+F	N	2	2	3	10	97	0.735	3	yes	T3	II A	yes	PP, EX, A	1	14; 29

(Until 31.12.2015)

UN No. or substance identification No.	Name and description	Class	Classification code	Packing group	Dangers	Type of tank vessel	Cargo tank design	Cargo tank type	Cargo tank equipment	Opening pressure of the high-velocity vent valve in kPa	Maximum degree of filling in %	Relative density at 20 °C	Type of sampling device	Pump room below deck permitted	Temperature class	Explosion group	Anti-explosion protection required	Equipment required	Number of blue cones/lights	Additional requirements/Remarks
(1)	(2)	(3a)	(3b)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
1268	PETROLEUM DISTILLATES, N.O.S or PETROLEUM PRODUCTS, N.O.S. (naphtha) vp50 ≤ 110 kPa	3	F1	II	3+N2+ CMR+F	N	2	2		10	97	0.735	3	yes	T3	II A	yes	PP, EX, A	1	14; 29
1268	PETROLEUM DISTILLATES, N.O.S, or PETROLEUM PRODUCTS, N.O.S. (benzene heart cut) vp50 ≤ 110 kPa	3	F1	II	3+N2+ CMR+F	N	2	2		10	97	0.765	3	yes	T3	II A	yes	PP, EX, A	1	14; 29
1987	ALCOHOLS, N.O.S. (CYCLOHEXANOL)	3	F1	III	3+N3+F	N	3	2	4		95	0.95	3	yes			no	PP	0	7; 17; 20: +46 ºC
2430	ALKYLPHENOLS, SOLID, N.O.S. (nonylphenol, isomeric mixture, molten)	8	C4	II	8+N1+F	N	3	1	4		95	0.95	3	yes			no	PP, EP	0	7; 17; 20: +125 ºC; 34
3256	ELEVATED TEMPERATURE LIQUID, FLAMMABLE, N.O.S. with flash-point above 60 °C, at or above its flash-point (Low QI Pitch)	3	F2	III	3+ (N2 or N3) +F	N	3	1	4		95	1,1-1,3	3	yes	T2	II B	yes	PP, EX, A	0	7
3257	ELEVATED TEMPERATURE LIQUID, N.O.S. at or above 100 °C and below its flash-point (including molten metals, molten salts, etc.)	9	M9	III	9+(N1, N2, N3, CMR, F or S)	N	4	1	4		95		3	yes			no	PP	0	7; 20:+115 ºC; 22; 24; 25; 27

(Until 31.12.2015)

UN No. or substance identification No.	Name and description	Class	Classification code	Packing group	Dangers	Type of tank vessel	Cargo tank design	Cargo tank type	Cargo tank equipment	Opening pressure of the high-velocity vent valve in kPa	Maximum degree of filling in %	Relative density at 20 °C	Type of sampling device	Pump room below deck permitted	Temperature class	Explosion group	Anti-explosion protection required	Equipment required	Number of blue cones/lights	Additional requirements/Remarks
(1)	(2)	(3a)	(3b)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
3257	ELEVATED TEMPERATURE LIQUID, N.O.S. at or above 100 °C and below its flash-point (including molten metals, molten salts, etc.)	9	M9	III	9+(N1, N2, N3, CMR, F or S)	N	4	1	4		95		3	yes			no	PP	0	7; 20:+225 ºC; 22; 24; 27
3295	HYDROCARBONS, LIQUID, N.O.S. vp50 > 175 kPa	3	F1	I	3+(N1, N2, N3, CMR, F or S)	N	1	1			97		1	yes	T4 [3)]	II B[4)]	yes	PP, EX, A	1	14; 27; 29
3295	HYDROCARBONS, LIQUID, N.O.S. vp50 > 175 kPa	3	F1	I	3+(N1, N2, N3, CMR, F or S)	N	2	2	1	50	97		1	yes	T4 [3)]	II B[4)]	yes	PP, EX, A	1	14; 27; 29
3295	HYDROCARBONS, LIQUID, N.O.S. 110 kPa < vp50 < 175 kPa	3	F1	I	3+(N1, N2, N3, CMR, F or S)	N	2	2		50	97		3	yes	T4 [3)]	II B[4)]	yes	PP, EX, A	1	14; 27; 29
3295	HYDROCARBONS, LIQUID, N.O.S. 110 kPa < vp50 < 150 kPa	3	F1	I	3+(N1, N2, N3, CMR, F or S)	N	2	2	3	10	97		3	yes	T4 [3)]	II B[4)]	yes	PP, EX, A	1	14; 27; 29
3295	HYDROCARBONS, LIQUID, N.O.S. 110 kPa < vp50 < 175 kPa	3	F1	II	3+(N1, N2, N3, CMR, F or S)	N	2	2		50	97		3	yes	T4 [3)]	II B[4)]	yes	PP, EX, A	1	14; 27; 29
3295	HYDROCARBONS, LIQUID, N.O.S. 110 kPa < vp50 < 150 kPa	3	F1	II	3+(N1, N2, N3, CMR, F or S)	N	2	2	3	10	97		3	yes	T4 [3)]	II B[4)]	yes	PP, EX, A	1	14; 27; 29
3295	HYDROCARBONS, LIQUID, N.O.S. vp50 ≤ 110 kPa	3	F1	I	3+(N1, N2, N3, CMR, F or S)	N	2	2		10	97		3	yes	T4 [3)]	II B[4)]	yes	PP, EX, A	1	14; 27; 29

(Until 31.12.2015)

UN No. or substance identification No.	Name and description	Class	Classification code	Packing group	Dangers	Type of tank vessel	Cargo tank design	Cargo tank type	Cargo tank equipment	Opening pressure of the high-velocity vent valve in kPa	Maximum degree of filling in %	Relative density at 20 °C	Type of sampling device	Pump room below deck permitted	Temperature class	Explosion group	Anti-explosion protection required	Equipment required	Number of blue cones/lights	Additional requirements/Remarks
(1)	(2)	(3a)	(3b)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
3295	HYDROCARBONS, LIQUID, N.O.S. vp50 ≤ 110 kPa	3	F1	II	3+(N1, N2, N3, CMR, F or S)	N	2	2		10	97		3	yes	T4 [3)]	II B[4)]	yes	PP, EX, A	1	14; 27; 29
3295	HYDROCARBONS, LIQUID, N.O.S.	3	F1	III	3+(N1, N2, N3, CMR, F or S)	N	3	2			97		3	yes	T4 [3)]	II B[4)]	yes	PP, EX, A	0	14; 27
3295	HYDROCARBONS, LIQUID, N.O.S. (1- octen)	3	F1	II	3+N2+F	N	2	2		10	97	0.71	3	yes	T3	II B[4)]	yes	PP, EX, A	1	14
3295	HYDROCARBONS, LIQUID, N.O.S. (polycyclic aromatic hydrocarbons mixture)	3	F1	III	3+CMR+F	N	3	2			97	1.08	3	yes	T1	II A	yes	PP, EX, A	0	14

(Until 31.12.2015)

3. Until 31.12.2018

UN No. or substance identification No.	Name and description	Class	Classification code	Packing group	Dangers	Type of tank vessel	Cargo tank design	Cargo tank type	Cargo tank equipment	Opening pressure of the high-velocity vent valve in kPa	Maximum degree of filling in %	Relative density at 20 °C	Type of sampling device	Pump room below deck permitted	Temperature class	Explosion group	Anti-explosion protection required	Equipment required	Number of blue cones/lights	Additional requirements/Remarks
(1)	(2)	(3a)	(3b)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
1202	GAS OIL or DIESEL FUEL or HEATING OIL (LIGHT) (flash-point not more than 60 °C)	3	F1	III	3+(N1, N2, N3, CMR, F)	N	4	2			97	< 0,85	3	yes			non	PP	0	
1202	GAS OIL complying with standard EN 590: 2004 or DIESEL FUEL or HEATING OIL (LIGHT) with flash-point as specified in EN 590:2004	3	F1	III	3+N2+F	N	4	2			97	0,82 - 0,85	3	yes			non	PP	0	
1202	GAS OIL or DIESEL FUEL or HEATING OIL (LIGHT) (flash-point more than 60 °C but not more than 100 °C)	3	F1	III	3+(N1, N2, N3, CMR, F or S)	N	4	2			97	< 1,1	3	yes			non	PP	0	
1223	KEROSENE	3	F1	III	3+N2+F	N	3	2			97	≤ 0,83	3	yes	T3	II A	yes	PP, EX, A	0	14
1300	TURPENTINE SUBSTITUTE	3	F1	III	3+N2+F	N	3	2			97	0.78	3	yes	T3	II B[4)]	yes	PP, EX, A	0	
1863	FUEL, AVIATION, TURBINE ENGINE vp50 > 175 kPa	3	F1	I	3+(N1, N2, N3, CMR, F)	N	1	1			97		1	yes	T4 [3)]	II B[4)]	yes	PP, EX, A	1	14; 29
1863	FUEL, AVIATION, TURBINE ENGINE vp50 > 175 kPa	3	F1	I	3+(N1, N2, N3, CMR, F)	N	2	2	1	50	97		2	yes	T4 [3)]	II B[4)]	yes	PP, EX, A	1	14; 29
1863	FUEL, AVIATION, TURBINE ENGINE 110 kPa < vp50 ≤ 175 kPa	3	F1	II	3+(N1, N2, N3, CMR, F)	N	2	2		50	97		3	yes	T4 [3)]	II B[4)]	yes	PP, EX, A	1	14; 29
1863	FUEL, AVIATION, TURBINE ENGINE 110 kPa < vp50 ≤ 150 kPa	3	F1	II	3+(N1, N2, N3, CMR, F)	N	2	2	3	10	97		3	yes	T4 [3)]	II B[4)]	yes	PP, EX, A	1	14; 29

(Until 31.12.2018)

UN No. or substance identification No.	Name and description	Class	Classification code	Packing group	Dangers	Type of tank vessel	Cargo tank design	Cargo tank type	Cargo tank equipment	Opening pressure of the high-velocity vent valve in kPa	Maximum degree of filling in %	Relative density at 20 °C	Type of sampling device	Pump room below deck permitted	Temperature class	Explosion group	Anti-explosion protection required	Equipment required	Number of blue cones/lights	Additional requirements/Remarks
(1)	(2)	(3a)	(3b)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
1863	FUEL, AVIATION, TURBINE ENGINE vp50 ≤ 110 kPa	3	F1	II	3+(N1, N2, N3, CMR, F)	N	2	2		10	97		3	yes	T4 [3)]	II B[4)]	yes	PP, EX, A	1	14; 29
1863	FUEL, AVIATION, TURBINE ENGINE	3	F1	III	3+(N1, N2, N3, CMR, F)	N	3	2			97		3	yes	T4 [3)]	II B[4)]	yes	PP, EX, A	0	14

(Until 31.12.2018)

1.6.7.5 ***Transitional provisions concerning the modification of tank vessels***

1.6.7.5.1 The modification of the cargo area of a vessel in order to achieve a Type N double-hull vessel is admissible until 31 December 2018 under the following conditions:

(a) The modified or new cargo area shall comply with the provisions of ADN. Transitional provisions under 1.6.7.2.2 may not be applied for the cargo area;

(b) The vessel parts outside of the cargo area shall comply with the provisions of ADN. Moreover, the following transitional provisions under 1.6.7.2.2 may be applied: 1.2.1, 9.3.3.0.3 (d), 9.3.3.51.3 and 9.3.3.52.4 last sentence;

(c) If goods which require explosion protection are entered in the list according to 1.16.1.2.5, accommodation and wheelhouses shall be equipped with a fire alarm system according to 9.3.3.40.2.3;

(d) The application of this sub-section shall be entered in the certificate of approval under No. 12 (Additional observations).

1.6.7.5.2 Modified vessels may continue to be operated beyond 31 December 2018. The time limits stipulated in the applied transitional provisions under 1.6.7.2.2 shall be observed.

1.6.7.6 ***Transitional provisions concerning the transport of gases in tank vessels***

Tank vessels in service on 1 January 2011 with a pump room below deck may continue to transport the substances listed in the following table until the renewal of the certificate of approval after 1 January 2045.

UN No. or ID No.	Class and classification code	Name and description
1005	2, 2TC	AMMONIA, ANHYDROUS
1010	2, 2F	1,2-BUTADIENE, STABILIZED
1010	2, 2F	1,3-BUTADIENE, STABILIZED
1010	2, 2F	BUTADIENE STABILIZED or BUTADIENES AND HYDROCARBON MIXTURE, STABILIZED, having a vapour pressure at 70 °C not exceeding 1.1 MPa (11 bar) and a density at 50 °C not lower than 0.525 kg/l
1011	2, 2F	BUTANE
1012	2, 2F	1-BUTYLENE
1020	2,2A	CHLOROPENTAFLUOROETHANE (REFRIGERANT GAS R 115)
1030	2,2F	1,1-DIFLUOROETHANE (REFRIGERANT GAS R 152a)
1033	2,2F	DIMETHYL ETHER
1040	2,2TF	ETHYLENE OXIDE WITH NITROGEN up to a total pressure of 1 MPa (10 bar) at 50 °C
1055	2,2F	ISOBUTYLENE
1063	2,2F	METHYL CHLORIDE (REFRIGERANT GAS R 40)
1077	2,2F	PROPYLENE
1083	2,2F	TRIMETHYLAMINE, ANHYDROUS
1086	2,2F	VINYL CHLORIDE, STABILIZED
1912	2,2F	METHYL CHLORIDE AND METHYLENE CHLORIDE MIXTURE
1965	2,2F	HYDROCARBON GAS MIXTURE, LIQUEFIED, N.O.S., (MIXTURE A)
1965	2,2F	HYDROCARBON GAS MIXTURE, LIQUEFIED, N.O.S.,

UN No. or ID No.	Class and classification code	Name and description
		(MIXTURE A0)
1965	2,2F	HYDROCARBON GAS MIXTURE, LIQUEFIED, N.O.S., (MIXTURE A01)
1965	2,2F	HYDROCARBON GAS MIXTURE, LIQUEFIED, N.O.S., (MIXTURE A02)
1965	2,2F	HYDROCARBON GAS MIXTURE, LIQUEFIED, N.O.S., (MIXTURE A1)
1965	2,2F	HYDROCARBON GAS MIXTURE, LIQUEFIED, N.O.S., (MIXTURE B)
1965	2,2F	HYDROCARBON GAS MIXTURE, LIQUEFIED, N.O.S., (MIXTURE B1)
1965	2,2F	HYDROCARBON GAS MIXTURE, LIQUEFIED, N.O.S., (MIXTURE B2)
1965	2,2F	HYDROCARBON GAS MIXTURE, LIQUEFIED, N.O.S., (MIXTURE C)
1969	2,2F	ISOBUTANE
1978	2,2F	PROPANE
9000		AMMONIA, ANHYDROUS, DEEPLY REFRIGERATED