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transmitted by the Secretariat

This document reproduces the draft amendments to RID adopted by the Joint Meeting at its sessions in 2008 and 2009 and by the RID Committee of Experts at its sessions in 2007 and 2008.

These draft amendments were taken from the following documents:

– ECE/TRANS/WP.15/AC.1/110 (OTIF/RID/RC/2008-A), Annex II, Section B

– ECE/TRANS/WP.15/AC.1/112 (OTIF/RID/RC/2008-B), Annex II, Section B

– ECE/TRANS/WP.15/AC.1/114/Add.1 (OTIF/RID/RC/2009-A/Add.1)

– ECE/TRANS/WP.15/AC.1/116/Add.1 (OTIF/RID/RC/2009-B/Add.1)

– OTIF/RID/RC/2007-A, Annex 1, Amendments for a date of entry into force of 1 January 2011

– OTIF/RID/RC/2008-B, Annex 1, Section C.

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2.3.3.2 Becomes **2.3.3.3**.

4.1.7.1 Amend to read as follows:

"Use of packagings (except IBCs)".

5.1.5.4 Becomes **5.1.5.5**.

5.4.4 Becomes **5.4.5**.

5.5.2 Amend to read as follows:

"Special provisions applicable to fumigated cargo transport units (UN 3359)".

6.2.2.9 Becomes **6.2.2.10**.

Insert the following new lines:

"**2.3.3.2** Determination of initial boiling point".

"**5.1.5.4** Specific provisions for excepted packages".

"**6.2.2.9** Marking of UN metal hydride storage systems".

PART 1

Chapter 1.1

1.1.3.1 Amend sub-paragraph (d) to read as follows:

"(d) the carriage undertaken by the competent authorities for the emergency response or under their supervision, insofar as such carriage is necessary in relation to the emergency response, in particular carriage undertaken to contain and recover the dangerous goods involved in an incident or accident and move them to the nearest appropriate safe place;".

1.1.3.2 In (e), delete "and" at the end.

Amend (f) to read

"(f) Gases contained in foodstuffs (except UN 1950), including carbonated beverages;".

Add the following new sub-paragraphs:

"(g) Gases contained in balls intended for use in sports; and

(h) Gases contained in light bulbs provided they are packaged so that the projectile effects of any rupture of the bulb will be contained within the package."

Chapter 1.2

Under "***Approval***", in the definition of "***Multilateral approval***", delete the last sentence ("The term "through or into" specifically excludes…").

In the definition of "***Battery-wagon***", replace "gases of Class 2" by:

"gases as defined in 2.2.2.1.1".

At the end of the definition of ***"Cryogenic receptacle"***, add:

"(see also *"Open cryogenic receptacle"*)".

Amend the definition for "***Gas cartridge***" to read as follows:

"***"Gas cartridge"***, see *"Small receptacle containing gas"*;".

In the definition of "***GHS***", replace "second" with "third" and "ST/SG/AC.10/30/Rev.2" with "ST/SG/AC.10/30/Rev.3".

[The amendment in the German version concerning the definition of "***IAEA***" does not apply to the English text.]

Amend the definition of "loader" to read as follows:

"***"Loader"*** means any *enterprise* which:

(a) Loads packaged *dangerous goods*, *small containers* or *portable tanks* into or onto a *wagon* or a *container*; or

(b) Loads a *container*, *bulk-container*, *tank-container* or *portable tank* onto a *wagon*."

In the definition of "***Manual of Tests and Criteria***", replace "fourth" with "fifth" and amend the text in the parenthesis to read "(ST/SG/AC.10/11/Rev.5)".

In the definition of "***Multiple-element gas container***", replace "gases of Class 2" by:

"gases as defined in 2.2.2.1.1".

In the definition of "***Portable tank***", replace "gases of Class 2" by:

"gases as defined in 2.2.2.1.1".

In the definition of "***Pressure receptacle***", insert before "and bundles":

", metal hydride storage systems".

In the definition of "***Repaired IBC***", in the second sentence, replace "manufacturer's specification" with:

"design type from the same manufacturer".

Amend the definition for "***Small receptacle containing gas***" to read as follows:

"***"Small receptacle containing gas (gas cartridge)"*** means a non-refillable receptacle meeting the relevant requirements of 6.2.6 containing, under pressure, a gas or a mixture of gases. It may be fitted with a valve;"

In the definition of "***Tank-container***", replace "gases of Class 2" by:

"gases as defined in 2.2.2.1.1".

In the definition of "***UN Model Regulations***", replace "fifteenth" with "sixteenth" and "(ST/SG/AC.10/1/Rev.15)" with "(ST/SG/AC.10/1/Rev.16)".

In the definition of **"*Wagon*"**, add at the end:

"(see also *battery-wagon*, *closed wagon*, *open wagon*, *sheeted wagon* and *tank-wagon*)".

Add the following new definitions in alphabetical order:

"***Cargo transport unit*** means a *wagon*, a *container*, a *tank-container*, *portable tank* or a *MEGC*;

NOTE: This definition applies only for the application of special provision 302 of Chapter 3.3 and of Chapter 5.5."

"Conveyance" means, for carriage by road or by rail, a vehicle or a *wagon*;

"Fuel cell" means an electrochemical device that converts the chemical energy of a fuel to electrical energy, heat and reaction products;

"Fuel cell engine" means a device used to power equipment and which consists of a *fuel cell* and its fuel supply, whether integrated with or separate from the *fuel cell*, and includes all appurtenances necessary to fulfil its function;

"Remanufactured large packaging" means a metal or rigid plastics large packaging that:

(a) Is produced as a UN type from a non-UN type; or

(b) Is converted from one UN design type to another UN design type.

Remanufactured large packagings are subject to the same requirements of RID that apply to new *large packagings* of the same type (see also design type definition in 6.6.5.1.2);

[to be inserted after the definition for "large packaging"]

"Reused large packaging" means a *large packaging* to be refilled which has been examined and found free of defects affecting the ability to withstand the performance tests; the term includes those which are refilled with the same or similar compatible contents and are carried within distribution chains controlled by the *consignor* of the product;

[to be inserted after the definition for "large packaging"]

"Metal hydride storage system" means a single complete hydrogen storage system, including a receptacle, metal hydride, pressure relief device, shut-off valve, *service equipment* and internal components used for the *carriage* of hydrogen only;

"Open cryogenic receptacle" means a transportable thermally insulated *receptacle* for refrigerated liquefied *gases* maintained at atmospheric pressure by continuous venting of the refrigerated liquefied *gas*;

"Through or into", for the carriage of Class 7 material, means through or into the countries in which a consignment is carried but specifically excludes countries "over" which a consignment is carried by air provided that there are no scheduled stops in those countries;

"Unloader" means any *enterprise* which:

(a) Removes a *container*, *bulk-container*, *MEGC*, *tank-container* or *portable tank* from a *wagon*; or

(b) Unloads packaged *dangerous goods*, *small containers* or *portable tanks* out of or from a *wagon* or a *container*; or

(c) Discharges *dangerous goods* from a *tank* (*tank-wagon*, *demountable tank*, *portable tank* or *tank-container*) or from a *battery-wagon*, *MEMU* or *MEGC* or from a *wagon*, *large container* or *small container* for *carriage in bulk* or a *bulk-container*."

Chapter 1.3

1.3.1 In the first sentence, replace "shall receive training" with:

"shall be trained".

Add a new second sentence to read as follows:

"Employees shall be trained in accordance with 1.3.2 before assuming responsibilities and shall only perform functions, for which required training has not yet been provided, under the direct supervision of a trained person."

1.3.2 [This amendment in the German version does not apply to the English text.]

1.3.2.1 [This amendment in the German version does not apply to the English text.]

1.3.2.2 In the first sentence, replace "Personnel shall receive detailed training" with:

"Personnel shall be trained".

In the second sentence, replace "the personnel shall be made aware" with:

"the personnel shall be aware".

In the third sentence, replace "shall also receive training covering" with:

"shall also be trained in".

[The amendment to the fourth sentence in the German version does not apply to the English text.]

In paragraph (a), in the first sentence after the heading, replace "shall receive training covering" with:

"shall be trained in".

In paragraph (b), in the first and second sentence after the heading, replace "shall receive training" with:

"shall be trained".

1.3.2.3 Replace "personnel shall receive training covering" with:

"shall be trained in".

1.3.2.4 Amend to read as follows:

"**1.3.2.4** The training shall be periodically supplemented with refresher training to take account of changes in regulations."

1.3.3 Amend the text after the heading to read as follows:

"Records of training received according to this Chapter shall be kept by the employer and made available to the employee or competent authority, upon request. Records shall be kept by the employer for a period of time established by the competent authority. Records of training shall be verified upon commencing a new employment."

Chapter 1.4

1.4.2 After the heading, insert the following new Note:

"**NOTE 1:** Several participants to which safety obligations are assigned in this section may be one and the same enterprise. Also, the activities and the corresponding safety obligations of a participant can be assumed by several enterprises."

Renumber existing Note as Note 2.

1.4.2.2.1 (b) Amend to read as follows:

"(b) Ascertain that all information prescribed in RID related to the dangerous goods to be carried has been provided by the consignor before carriage, that the prescribed documentation is attached to the transport document or if electronic data processing (EDP) or if electronic data interchange (EDI) techniques are used instead of paper documentation, that data is available during transport in a manner at least equivalent to that of paper documentation;".

1.4.2.3 Amend to read as follows:

"**1.4.2.3 Consignee**

1.4.2.3.1 The consignee has the obligation not to defer acceptance of the goods without compelling reasons and to verify, after unloading, that the requirements of RID concerning him have been complied with.

1.4.2.3.2 A wagon or container may only be returned or reused once the requirements of RID concerning the unloading have been complied with.

1.4.2.3.3 If the consignee makes use of the services of other participants (unloader, cleaner, decontamination facility, etc.) he shall take appropriate measures to ensure that the requirements of 1.4.2.3.1 and 1.4.2.3.2 of RID have been complied with."

Add a new sub-section 1.4.3.7 to read as follows:

"**1.4.3.7 Unloader**

NOTE: In this sub-section, unloading covers removal, unloading and discharging as indicated in the definition of unloader in 1.2.1.

1.4.3.7.1 In the context of 1.4.1, the unloader shall in particular:

(a) Ascertain that the correct goods are unloaded by comparing the relevant information on the transport document with the information on the package, container, tank, MEGC or wagon;

(b) Before and during unloading, check whether the packagings, the tank, the wagon or container have been damaged to an extent which would endanger the unloading operation. **[**If this is the case, unloading shall not be carried out until appropriate measures have been taken**]**;

(c) Comply with all relevant requirements concerning unloading;

(d) Immediately following the unloading of the tank, wagon or container:

(i) Remove any dangerous residues which have adhered to the outside of the tank, wagon or container during the process of unloading; and

(ii) Ensure the closure of valves and inspection openings;

(e) Ensure that the prescribed cleaning and decontamination of the wagons or containers is carried out; and

(f) Ensure that the wagons and containers once completely unloaded, cleaned, degassed and decontaminated, no longer display placards and orange-coloured plate markings.

1.4.3.7.2 If the unloader makes use of the services of other participants (cleaner, decontamination facility, etc.) he shall take appropriate measures to ensure that the requirements of RID have been complied with."

Chapter 1.6

1.6.1.13 [This amendment in the German version does not apply to the English text.]

1.6.1.14 Amend to read as follows:

"**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 or which was not required to meet the criteria of 6.5.6.9.5 (d) at the time it was subjected to the drop test, may still be used."

1.6.1.15 [This amendment in the German version does not apply to the English text.]

1.6.1.18 [This amendment in the German version does not apply to the English text.]

Insert new 1.6.1.19 and 1.6.1.20 to read as follows:

"**1.6.1.19** Provisions concerning the classification of environmentally hazardous substances applicable until 31 December 2010 may be applied until 31 December 2012.

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."

1.6.2.7 Replace "6.2.2.9" with:

"6.2.2.10".

Add the following new transitional measures:

"**1.6.2.8** Type approvals for pressure receptacles issued before 1 July 2011 shall be reviewed and brought into conformity with the provisions of 1.8.7.2.4 before 1 January 2013.

1.6.2.9 The provisions of packing instruction P 200 (10), special packing provision v of 4.1.4.1 applicable until 31 December 2010 may be applied by **[**RID Contracting States**]** to cylinders constructed before 1 January 2015.

1.6.2.10 Refillable welded steel cylinders for the carriage of gases of UN Nos. 1011, 1075, 1965, 1969 or 1978, granted 15 year intervals for periodic inspection in accordance with packing instruction P 200 (10), special packing provision v of 4.1.4.1 as applicable until 31 December 2010 by the competent authority of the country (countries) of carriage, may continue to be periodically inspected according to those provisions.

1.6.2.11 **[**RID Contracting States**]** need not apply the requirements of 1.8.6, 1.8.7 or 1.8.8 for the conformity assessment of gas cartridges before 1 January 2013. In this case, gas cartridges constructed and prepared for carriage before 1 January 2013 may still be carried after this date, provided all the applicable provisions of RID are met."

1.6.3.25 [These amendments in the German version do not apply to the English text.]

1.6.3.35 [This amendment in the German version does not apply to the English text.]

Add the following new transitional measures:

"**1.6.3.37** Type approvals for tank-wagons and battery-wagons issued before 1 July 2011 shall be reviewed and brought into conformity with the provisions of 1.8.7.2.4 or 6.8.2.3.3 before 1 January 2013.

1.6.3.38 Tank-wagons and battery wagons designed and constructed in accordance with standards applicable at the time of their construction (see 6.8.2.6 and 6.8.3.6) according to the provisions of RID which were applicable at that time may still be used unless restricted by a specific transitional measure.

1.6.3.39 Tank-wagons constructed before 1 January 2011 in accordance with the requirements of 6.8.2.2.3 in force up to 31 December 2010 but which do not, however, conform to the requirements of 6.8.2.2.3, second paragraph, concerning the position of the flame trap or flame arrester may still be used."

Add the following new transitional measures:

["1.6.3.x Tank-wagons and battery-wagons

– for gases of Class 2 with classification codes containing the letter(s) F, T, TF, TC, TO, TFC or TOC, and

– for substances of classes 3 to 8 carried in the liquid state and to which tank code L10BH, L10CH, L10DH, L15CH, L15DH or L21DH is assigned in column (12) of Table A of Chapter 3.2,

constructed before 1 January 2011 which do not, however, conform to the requirements of 6.8.4 (b) concerning special provision TE xx applicable from 1 January 2011 may continue to be used."**]**

"**1.6.3.y** Tank-wagons constructed before 1 January 2011 in accordance with the requirements in force up to 31 December 2010, but which do not conform to the requirements of 6.8.2.1.29 applicable as from 1 January 2011, may still be used."

1.6.4.15 [This amendment in the German version does not apply to the English text.]

1.6.4.32 [This amendment in the German version does not apply to the English text.]

1.6.4.34 [This amendment in the German version does not apply to the English text.]

Add the following new transitional measures:

"**1.6.4.35** Type approvals for tank-containers and MEGCs issued before 1 July 2011 shall be reviewed and brought into conformity with the provisions of 1.8.7.2.4 or 6.8.2.3.3 before 1 January 2013.

1.6.4.36 For substances where TP 37 is assigned in column (11) of Table A of Chapter 3.2, the portable tank instruction prescribed in RID applicable up to 31 December 2010 may continue to be applied until 31 December 2016.

1.6.4.37 Portable tanks and MEGCs manufactured before 1 January 2012, that conform to the marking requirements of 6.7.2.20.1, 6.7.3.16.1, 6.7.4.15.1 or 6.7.5.13.1 applicable up to 31 December 2010, as relevant, may continue to be used if they comply with all other relevant requirements of RID applicable as from 1 January 2011 including, when applicable, the requirement of 6.7.2.20.1 (g) for marking the symbol "S" on the plate when the shell or the compartment is divided by surge plates into sections of not more than 7 500 litres capacity. When the shell, or the compartment, was already divided by surge plates into sections of not more than 7 500 litres capacity before 1 January 2012, the capacity of the shell, or respectively of the compartment, need not be supplemented with the symbol "S" until the next periodic inspection or test according to 6.7.2.19.5 is performed.

1.6.4.38 Portable tanks manufactured before 1 January 2014 need not be marked with the portable tank instruction as required in 6.7.2.20.2, 6.7.3.16.2 and 6.7.4.15.2 until the next periodic inspection and test.

1.6.4.39 Tank-containers and MEGCs designed and constructed in accordance with standards applicable at the time of their construction (see 6.8.2.6 and 6.8.3.6) according to the provisions of RID which were applicable at that time may still be used unless restricted by a specific transitional measure.

1.6.4.40 Tank-containers constructed before 1 January 2011 in accordance with the requirements of 6.8.2.2.3 in force up to 31 December 2010 but which do not, however, conform to the requirements of 6.8.2.2.3, second paragraph, concerning the position of the flame trap or flame arrester may still be used."

Chapter 1.7

1.7.1.1 In the second sentence, replace "2005" with:

"2009" (twice).

Amend the last sentence to read as follows:

"Explanatory material can be found in "Advisory Material for the IAEA Regulations for the Safe Transport of Radioactive Material (2005 Edition)", Safety Standard Series No. TS-G-1.1 (Rev.1), IAEA, Vienna (2008)."

1.7.1.2 Amend the first sentence to read as follows:

"The objective of RID is to establish requirements that shall be satisfied to ensure safety and to protect persons, property and the environment from the effects of radiation in the carriage of radioactive material."

1.7.1.3 In the third sentence, replace "that is characterized" by:

"that are characterized".

1.7.1.5 Renumber the text after the heading as **1.7.1.5.1** and amend the beginning and subparagraph (a) to read as follows:

"**1.7.1.5.1** Excepted packages which may contain radioactive material in limited quantities, instruments, manufactured articles and empty packagings as specified in 2.2.7.2.4.1 shall be subject only to the following provisions of Parts 5 to 7:

(a) The applicable provisions specified in 5.1.2, 5.1.3.2, 5.1.4, 5.1.5.4, 5.2.1.9 and 7.5.11 CW 33 (5.2);".

The last sentence becomes new paragraph **1.7.1.5.2**.

1.7.2.3 At the end of the second sentence, add:

"and 7.5.11 CW 33 (1.1)".

1.7.2.5 Replace "shall receive appropriate training concerning" with:

"shall be appropriately trained in".

Chapter 1.8

1.8.6 Amend to read as follows:

"**1.8.6 Administrative controls for application of the conformity assessments, periodic inspections, and exceptional checks described in 1.8.7**

1.8.6.1 Approval of inspection bodies

The competent authority may approve inspection bodies for conformity assessments, periodic inspections, exceptional checks and surveillance of the in-house inspection service as specified in 1.8.7.

1.8.6.2 Operational obligations for the competent authority, its delegate or inspection body

1.8.6.2.1 The competent authority, its delegate or inspection body shall carry out conformity assessments, periodic inspections and exceptional checks in a proportionate manner, avoiding unnecessary burdens. The competent authority, its delegate or inspection body shall perform its activities taking into consideration the size, the sector and the structure of the undertakings involved, the relative complexity of the technology and the serial character of production.

1.8.6.2.2 Nevertheless the competent authority, its delegate or inspection body shall respect the degree of rigour and the level of protection required for the compliance of the transportable pressure equipment by the provisions of parts 4 and 6 as applicable.

1.8.6.2.3 Where a competent authority, its delegate or inspection body finds out that requirements laid down in parts 4 or 6 have not been met by the manufacturer, it shall require the manufacturer to take appropriate corrective measures and it shall not issue any type approval certificate or certificate of conformity.

1.8.6.3 Information obligation

[RID Contracting States**]** shall publish their national procedures for the assessment, appointment and monitoring of inspection bodies and of any changes to that information.

1.8.6.4 Delegation of inspection tasks

NOTE: In-house inspection services according to 1.8.7.6 are not covered by 1.8.6.4.

1.8.6.4.1 Where an inspection body uses the services of any other entity (e.g. subcontractor, subsidiary), to carry out specific tasks connected with the conformity assessment, periodic inspection or exceptional checks, this entity shall be included in the accreditation of the inspection body, or it shall be accredited separately. The inspection body shall ensure that this entity meets the requirements set out for the tasks given to it with the same level of competence and safety as laid down for inspection bodies (see 1.8.6.8) and the inspection body shall monitor it. The inspection body shall inform the competent authority about the above mentioned arrangements.

1.8.6.4.2 The inspection body shall take full responsibility for the tasks performed by such entities wherever the tasks are performed by them.

1.8.6.4.3 The inspection body shall not delegate the whole task of conformity assessment, periodic inspection or exceptional checks. In any case, the assessment and the issue of certificates shall be carried out by the inspection body itself.

1.8.6.4.4 Activities shall not be delegated without the agreement of the applicant.

1.8.6.4.5 The inspection body shall keep at the disposal of the competent authority the relevant documents concerning the assessment of the qualifications and the work carried out by the above mentioned entities.

1.8.6.5 Information obligations for inspection bodies

Any inspection body shall inform the competent authority, which had approved it, of the following:

(a) except when the provisions of 1.8.7.2.4 apply – any refusal, restriction, suspension or withdrawal of type approval certificates;

(b) any circumstance(s) affecting the scope of and conditions for the approval as granted by the competent authority;

(c) any request for information on conformity assessment activities performed which they have received from competent authorities monitoring compliance according to 1.8.1 or 1.8.6.6;

(d) on request, conformity assessment activities performed within the scope of their approval and any other activity performed, including delegation of tasks.

1.8.6.6 The competent authority shall ensure the monitoring of the inspection bodies and shall revoke or restrict the approval given, if it notes that an approved body is no longer in compliance with the approval and the requirements of 1.8.6.8 or does not follow the procedures specified in the provisions of RID.

1.8.6.7 If the approval of the inspection body is revoked or restricted or if the inspection body ceased activity, the competent authority shall take the appropriate steps to ensure that the files are either processed by another inspection body or kept available.

1.8.6.8 The inspection body shall:

(a) Have a staff with an organisational structure, capable, trained, competent and skilled, to satisfactorily perform its technical functions;

(b) Have access to suitable and adequate facilities and equipment;

(c) Operate in an impartial manner and be free from any influence which could prevent it from doing so;

(d) Ensure commercial confidentiality of the commercial and proprietary activities of the manufacturer and other bodies;

(e) Maintain clear demarcation between actual inspection body functions and unrelated functions;

(f) Have a documented quality system;

(g) Ensure that the tests and inspections specified in the relevant standard and in RID are performed; and

(h) Maintain an effective and appropriate report and record system in accordance with 1.8.7 and 1.8.8.

The inspection body shall additionally be accredited according to the standard EN ISO/IEC 17020:2004, as specified in 6.2.2.9 and 6.2.3.6 and TA 4 and TT 9 of 6.8.4.

An inspection body starting a new activity may be approved temporarily. Before temporary designation, the competent authority shall ensure that the inspection body meets the requirements of the standard EN ISO/IEC 17020:2004. The inspection body shall be accredited in its first year of activity to be able to continue this new activity."

1.8.7 In the Note, replace "6.2.2.9" with:

"6.2.2.10".

1.8.7.1.1 In the first sentence, delete:

"the table in".

In the second sub-paragraph, replace "6.2.2.9" with:

"6.2.2.10".

1.8.7.1.4 Replace "6.2.2.9" with:

"6.2.2.10".

Add the following new paragraphs 1.8.7.1.5 and 1.8.7.1.6:

"**1.8.7.1.5** Design type approval certificates and certificates of conformity – including the technical documentation – shall be retained by the manufacturer or by the applicant for the type approval, if he is not the manufacturer, and by the inspection body, who issued the certificate, for a period of at least 20 years starting from the last date of production of products of the same type.

1.8.7.1.6 When a manufacturer or owner intends to cease operation, he shall send the documentation to the competent authority. The competent authority shall then retain the documentation for the rest of the period specified in 1.8.7.1.5."

1.8.7.2 Insert the following sentence after the heading:

"Type approvals authorise the manufacture of pressure receptacles, tanks, battery-wagons or MEGCs within the period of validity of that approval."

1.8.7.2.3 Amend to read as follows:

"**1.8.7.2.3** Where the type satisfies all applicable provisions, the competent authority, its delegate or the inspection body, shall issue a type approval certificate to the applicant.

This certificate shall contain:

(a) The name and address of the issuer;

(b) The name and address of the manufacturer and of the applicant when the applicant is not the manufacturer;

[(c) and (d) unchanged]

(e) The necessary data for identification of the type and variation, as defined by the relevant standard;

(f) The reference to the type examination report(s); and

(g) The maximum period of validity of the type approval.

[The last sentence remains unchanged.]"

Add the following new paragraph:

"**1.8.7.2.4** The type approval shall be valid for a maximum of ten years. If within that period the relevant technical requirements of RID (including referenced standards) have changed so that the approved type is no longer in conformity with them, the relevant body which issued the type approval shall withdraw it and inform the holder of the type approval.

NOTE: For the ultimate dates for withdrawal of existing type approvals, see column (5) of the tables in 6.2.4 and 6.8.2.6 or 6.8.3.6 as appropriate.

If a type approval has expired or has been withdrawn, the manufacture of the pressure receptacles, tanks, battery-wagons or MEGCs according to that type approval is no longer authorised.

In such a case, the relevant provisions concerning the use and periodic inspection of pressure receptacles, tanks, battery-wagons or MEGCs contained in the type approval which has expired or has been withdrawn shall continue to apply to these pressure receptacles, tanks, battery-wagons or MEGCs constructed before the expiry or the withdrawal if they may continue to be used.

They may continue to be used as long as they remain in conformity with the requirements of RID. If they are no longer in conformity with the requirements of RID they may continue to be used only if such use is permitted by relevant transitional measures in Chapter 1.6.

Type approvals may be renewed by a complete review and assessment for conformity with the provisions of RID applicable at the date of renewal. Renewal is not

permitted after a type approval has been withdrawn. Interim amendments of an existing type approval (e.g. for pressure receptacles minor amendments such as the addition of further sizes or volumes not affecting conformity, or for tanks see 6.8.2.3.2) do not extend or modify the original validity of the certificate.

NOTE: The review and assessment of conformity can be done by a body other than the one which issued the original type approval.

The issuing body shall keep all documents for the type approval (see 1.8.7.7.1) for the whole period of validity including its renewals if granted."

1.8.7.4.2 Amend to read as follows:

"**1.8.7.4.2** The relevant body shall:

[(a) and (b) unchanged]

(c) Issue an initial inspection and test report to the applicant relating to the detailed tests and verifications carried out and the verified technical documentation;

(d) Draw up a written certificate of conformity of the manufacture and affix its registered mark when the manufacture satisfies the provisions; and

(e) Check if the type approval remains valid after provisions of RID (including referenced standards) relevant to the type approval have changed.

The certificate in (d) and report in (c) may cover a number of items of the same type (group certificate or report)."

1.8.7.5 Number the existing text under the heading as **1.8.7.5.1** and add the following new paragraph 1.8.7.5.2:

"**1.8.7.5.2** Reports of periodic inspections and tests of pressure receptacles shall be retained by the applicant at least until the next periodic inspection.

NOTE: For tanks see provisions for tank records in 4.3.2.1.7."

Einen neuen Abschnitt 1.8.8 mit folgendem Wortlaut hinzufügen:

1.8.7.7.2 Insert the following new sub-paragraph (b):

"(b) A copy of the type approval certificate;".

Existing sub-paragraphs (b) to (h) become (c) to (i).

Add the following new section 1.8.8:

"**1.8.8 Procedures for conformity assessment of gas cartridges**

When assessing the conformity of gas cartridges, one of the following procedures shall be applied:

(a) the procedure in section 1.8.7 for non-UN pressure receptacles, with the exception of 1.8.7.5; or

(b) the procedure in sub-sections 1.8.8.1 to 1.8.8.7.

1.8.8.1 General provisions

1.8.8.1.1 The supervision of manufacture shall be carried out by an Xa body and the tests as required in 6.2.6 shall be carried out either by that Xa body or by an IS-body approved by that Xa body; for definition of Xa and IS body see definitions in 6.2.3.6.1. Conformity assessment shall be carried out by the competent authority, its delegate or its approved inspection body of an [RID Contracting State].

1.8.8.1.2 By the application of 1.8.8, the applicant shall demonstrate, ensure and declare on his sole responsibility the conformity of gas cartridges with the provisions of 6.2.6 and all further applicable provisions of RID.

1.8.8.1.3 The applicant shall

(a) carry out a design type examination of each type of gas cartridges (including materials to be used and variations of that type, e.g. volumes, pressures, drawings and closing and release devices) according to 1.8.8.2;

(b) operate an approved quality system for design, manufacture, inspection and testing according to 1.8.8.3;

(c) operate an approved testing regime according to 1.8.8.4 for the tests required in 6.2.6;

(d) apply for the approval of his quality system for supervision of manufacture and for testing to one Xa body of his choice of the [RID Contracting State]; if the applicant is not established in a [RID Contracting State] he shall apply to one Xa body of a [RID Contracting State] prior to first transport into a [RID Contracting State];

(e) if the gas cartridge is finally assembled from parts manufactured by the applicant by one or more other enterprise(s), he shall provide written instructions how to assemble and fill the gas cartridges to meet the provisions of his type examination certificate.

1.8.8.1.4 Where the applicant and enterprises assembling and/or filling gas cartridges according to the instructions of the applicant, can demonstrate to the satisfaction of the Xa body conformity with the provisions of 1.8.7.6 excluding 1.8.7.6.1 (d) and 1.8.7.6.2 (b), they may establish an in-house inspection service which may perform part or all of the inspections and tests specified in 6.2.6.

1.8.8.2 Design type examination

1.8.8.2.1 The applicant shall establish the technical documentation [as specified in 1.8.8.1.3 (a)] for each type of gas cartridges including the technical standard(s) applied. If he chooses to apply a standard not referenced in 6.2.6, he shall add the standard applied to the documentation.

1.8.8.2.2 The applicant shall retain the technical documentation together with samples of that type at the disposal of the Xa body during production and afterwards for a period of minimum five years starting from the last date of production of gas cartridges according to that type examination certificate.

1.8.8.2.3 The applicant shall after careful examination issue a design type certificate which shall be valid for a maximum period of ten years; he shall add this certificate to the documentation. This certificate authorises him to produce gas cartridges of that type for that period.

1.8.8.2.4 If within that period the relevant technical requirements of RID (including referenced standards) have changed so that the design type is no longer in conformity with them, the applicant shall withdraw his type examination certificate and inform the Xa body.

1.8.8.2.5 The applicant may after careful and complete review reissue the certificate for another period of maximum ten years.

1.8.8.3 Supervision of manufacture

1.8.8.3.1 The procedure of design type examination as well as the manufacturing process shall be subject to a survey by the Xa body to ensure the type certified by the applicant and the product as produced are in conformity with the provisions of the design type certificate and the applicable provisions of RID. If 1.8.8.1.3 (e) applies, the assembling and filling enterprises shall be included in that procedure.

1.8.8.3.2 The applicant shall take all the necessary measures to ensure that the manufacturing process complies with the applicable provisions of RID and of his design type certificate and its annexes. If 1.8.8.1.3 (e) applies, the assembling and filling enterprises shall be included in that procedure.

1.8.8.3.3 The Xa body shall:

(a) verify the conformity of the design type examination of the applicant and conformity of the type of gas cartridges with the technical documentation specified in 1.8.8.2;

(b) verify that the manufacturing process produces products in conformity with the requirements and the documentation which apply to it; if the gas cartridge is finally assembled from parts manufactured by the applicant by one or more enterprise(s), the Xa body shall also verify that the gas cartridges are in full conformity with all applicable provisions after final assembly and filling and that the instructions of the applicant are correctly applied;

(c) verify that the personnel undertaking the permanent joining of parts and the tests are qualified or approved;

(d) record the results of its surveys.

1.8.8.3.4 If the findings of the Xa body show non-conformity of the design type certificate of the applicant or the manufacturing process, he shall require appropriate corrective measures or withdrawal of the certificate from the applicant.

1.8.8.4 Leakproofness test

1.8.8.4.1 The applicant and enterprises finally assembling and filling gas cartridges according to the instructions of the applicant shall:

(a) carry out the tests required in 6.2.6;

(b) record the test results;

(c) issue a certificate of conformity only for gas cartridges, which are in full compliance with the provisions of his design type examination and the applicable provisions of RID and have successfully passed the tests as required in 6.2.6;

(d) retain the documentation as specified in 1.8.8.7 during production and afterwards for a period of minimum five years from the last date of production of gas cartridges belonging to one type approval for inspection by the Xa body at random intervals;

(e) affix a durable and legible mark identifying the type of gas cartridge, the applicant and the date of production or batch number; where due to limited available space the mark cannot be fully applied to the body of the gas cartridge, he shall affix a durable tag with this information to the gas cartridge or place it together with a gas cartridge in an inner packaging.

1.8.8.4.2 The Xa body shall:

(a) perform the necessary examinations and tests at random intervals, but at least shortly after starting of manufacture of a type of gas cartridges and thereafter at least once every three years, in order to verify that the procedure for design type examination of the applicant as well as that the manufacture and testing of the product are carried out in accordance with the design type certificate and the relevant provisions;

(b) check the certificates supplied by the applicant;

(c) carry out the tests as required in 6.2.6 or approve the program of testing and the in-house inspection service to carry out the tests.

1.8.8.4.3 The certificate shall contain as a minimum:

(a) the name and address of the applicant and – when these are different – the enterprise(s) carrying out the final assembly in accordance with the written instructions of the applicant;

(b) a reference to the version of RID and the standard(s) used for manufacture and tests;

(c) the result of inspections and tests;

(d) the data for the marking as required in 1.8.8.4.1 (e).

1.8.8.5 (Reserved)

1.8.8.6 Surveillance of the in-house inspection service

When the applicant or enterprise assembling and/or filling gas cartridges has established an in-house inspection service, the provisions of 1.8.7.6 excluding 1.8.7.6.1 (d) and 1.8.7.6.2 (b) shall be applied. The enterprise assembling and/or filling gas cartridges shall comply with the provisions relevant to the applicant.

1.8.8.7 Documents

The provisions of 1.8.7.7.1, 1.8.7.7.2, 1.8.7.7.3 and 1.8.7.7.5 shall be applied."

Chapter 1.10

Add new 1.10.2.3 and 1.10.2.4 to read as follows:

"**1.10.2.3** Such training shall be provided or verified upon employment in a position involving dangerous goods transport and shall be periodically supplemented with refresher training.

1.10.2.4 Records of all security training received shall be kept by the employer and made available to the employee or competent authority, upon request. Records shall be kept by the employer for a period of time established by the competent authority."

1.10.5 In the Table, in the third column, for "Class 6.2", amend the text in parentheses to read:

"(UN Nos. 2814 and 2900, except for animal material)".

1.10.6 Amend to read as follows:

"**1.10.6** For radioactive material, the provisions of this Chapter are deemed to be complied with when the provisions of the Convention on Physical Protection of Nuclear Material[17] and the IAEA circular on "The Physical Protection of Nuclear Material and Nuclear Facilities"[18] are applied.

[17] IAEACIRC/274/Rev.1, IAEA, Vienna (1980).

[18] IAEACIRC/225/Rev.4 (Corrected), IAEA, Vienna (1999). See also "Guidance and Considerations for the Implementation of INFCIRC/225/Rev.4, the Physical Protection of Nuclear Material and Nuclear Facilities, IAEA-TECDOC-967/Rev.1."

1.11 Footnote 17 becomes 19.

PART 2

Chapter 2.1

2.1.2.3 – **2.1.2.6** become **2.1.2.4** – **2.1.2.7**.

Insert a new 2.1.2.3 to read as follows:

"**2.1.2.3** A substance may contain technical impurities (for example those deriving from the production process) or additives for stability or other purposes that do not affect their classification. However, a substance mentioned by name, i.e. listed as a single entry in Table A of Chapter 3.2, containing technical impurities or additives for stability or other purposes affecting its classification shall be considered a solution or mixture (see 2.1.3.3)."

2.1.3.3 Amend to read as follows:

"**2.1.3.3** A solution or mixture composed of a single predominant substance mentioned by name in Table A of Chapter 3.2 and one or more substances not subject to RID and/or traces of one or more substances mentioned by name in Table A of Chapter 3.2, shall be assigned the UN number and proper shipping name of the predominant substance mentioned by name in Table A of Chapter 3.2 unless:

(a) The solution or mixture is mentioned by name in Table A of Chapter 3.2;

(b) The name and description of the substance mentioned by name in Table A of Chapter 3.2 specifically indicate that they apply only to the pure substance;

(c) The class, classification code, packing group, or physical state of the solution or mixture is different from that of the substance mentioned by name in Table A of Chapter 3.2; or

(d) The hazard characteristics and properties of the solution or mixture necessitate emergency response measures that are different from those required for the substance mentioned by name in Table A of Chapter 3.2.

In those other cases, except the one described in (a), the solution or mixture shall be classified as a substance not mentioned by name in the relevant class under a collective entry listed in sub-section 2.2.x.3 of that class taking account of the subsidiary risks presented by that solution or mixture, if any, unless the solution or mixture does not meet the criteria of any class, in which case it is not subject to RID."

2.1.3.4.1 Move the entry "UN 2481 ETHYL ISOCYANATE" from the first indent (Class 3) to the second indent (Class 6.1).

2.1.3.5 Replace "2.1.2.4" with:

"2.1.2.5".

2.1.3.5.3 (a) In the text in parenthesis, add after "excepted packages":

", for which special provision 290 of Chapter 3.3 applies,".

2.1.3.6 Replace "2.1.2.4" with:

"2.1.2.5".

Chapter 2.2

Section 2.2.1

2.2.1.1.1 Add a new paragraph at the end to read as follows:

"For the purposes of Class 1, the following definition applies:

Phlegmatized means that a substance (or "phlegmatizer") has been added to an explosive to enhance its safety in handling and carriage. The phlegmatizer renders the explosive insensitive, or less sensitive, to the following actions: heat, shock, impact, percussion or friction. Typical phlegmatizing agents include, but are not limited to: wax, paper, water, polymers (such as chlorofluoropolymers), alcohol and oils (such as petroleum jelly and paraffin)."

2.2.1.1.6 In the last sentence of Note 2, insert before "packages":

"articles and".

2.2.1.1.7.5 In Note 1, replace "all pyrotechnic composition" with:

"all pyrotechnic substances".

Amend Note 2 to read as follows:

"**2:** "Flash composition" in this table refers to pyrotechnic substances in powder form or as pyrotechnic units as presented in the fireworks, that are used to produce an aural effect, or used as a bursting charge or lifting charge, unless the time taken for the pressure rise is demonstrated to be more than 8 ms for 0.5 g of pyrotechnic substance in the HSL Flash Composition Test in Appendix 7 of the Manual of Tests and Criteria."

In the default fireworks classification table, replace "pyrotechnic composition" whenever it appears with:

"pyrotechnic substance".

2.2.1.1.8 For "POWDER, SMOKELESS" add after "UN Nos. 0160, 0161":

", 0509".

Section 2.2.2

2.2.2.1.1 Delete Note 4.

2.2.2.1.5 Under "Oxidizing gases", amend the second sentence ("Oxidizing ability … ISO 10156-2:2005)") to read as follows:

"These are pure gases or gas mixtures with an oxidizing power greater than 23.5% as determined by a method specified in ISO 10156:1996 or ISO 10156-2:2005."

Section 2.2.3

2.2.3.2.1 At the end, replace "2.3.3.2" with:

"2.3.3.3".

2.2.3.3 Under classification code F1, amend the name and description for UN No. 1999 to read:

"TARS, LIQUID, including road oils, and cutback bitumens".

Section 2.2.42

2.2.42.1.3 Amend to read as follows:

"**2.2.42.1.3** Self-heating of a substance is a process where the gradual reaction of that substance with oxygen (in air) generates heat. If the rate of heat production exceeds the rate of heat loss, then the temperature of the substance will rise which, after an induction time, may lead to self-ignition and combustion."

Section 2.2.43

2.2.43.3 Under classification code "W1" for the two entries for UN No. 1391, delete:

"having a flash-point above 60 °C".

Under classification code "WF1", replace the two entries for UN No. 1391 with the two following new entries:

"3482 ALKALI METAL DISPERSION, FLAMMABLE or
3482 ALKALINE EARTH METAL DISPERSION, FLAMMABLE".

Section 2.2.52

2.2.52.4 In the table, amend the entries listed below as follows:

Organic peroxide		**Column**	**Amendment**
tert-AMYLPEROXY-3,5,5-TRIMETHYLHEXANOATE		Subsidiary risks and remarks	Delete "3)".
DI-(2-tert-BUTYLPEROXYISOPRO-PYL)BENZENE(S)		Organic peroxide	Amend to read as follows: "DI-(tert-BUTYLPEROXY-ISOPROPYL)-BENZENE(S)".
2,5-DIMETHYL-2,5-DI-(tert-BUTYLPEROXY)HEXANE *(Concentration > 52 – 100)*	(1st row)	Delete.	

Insert the following new entries:

Organic peroxide	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**	**(7)**	**(8)**	**(9)**	**(10)**	**(11)**
2,5-DIMETHYL-2,5-DI-(tert-BUTYLPEROXY)-HEXANE	> 90 – 100					OP5			3103	
2,5-DIMETHYL-2,5-DI-(tert-BUTYLPEROXY)-HEXANE	> 52 – 90	≥ 10				OP7			3105	

Section 2.2.61

2.2.61.1.1 Add a new note at the end to read as follows:

"**NOTE:** Genetically modified microorganisms and organisms shall be assigned to this class if they meet the conditions for this class."

2.2.61.3 Under classification code "TFC", add at the end (the text between brackets is deleted):

"3488 TOXIC BY INHALATION LIQUID, FLAMMABLE, CORROSIVE, N.O.S. with an inhalation toxicity lower than or equal to 200 ml/m³ and saturated vapour concentration greater than or equal to 500 LC_{50}

3489 TOXIC BY INHALATION LIQUID, FLAMMABLE, CORROSIVE, N.O.S. with an inhalation toxicity lower than or equal to 1000 ml/m³ and saturated vapour concentration greater than or equal to 10 LC_{50}

3492 TOXIC BY INHALATION LIQUID, CORROSIVE, FLAMMABLE, N.O.S. with an inhalation toxicity lower than or equal to 200 ml/m³ and saturated vapour concentration greater than or equal to 500 LC_{50}

3493 TOXIC BY INHALATION LIQUID, CORROSIVE, FLAMMABLE, N.O.S. with an inhalation toxicity lower than or equal to 1000 ml/m³ and saturated vapour concentration greater than or equal to 10 LC_{50}".

After classification code "TFC", add a new branch to read as follows:

flammable, water-reactive	**TFW**	3490	TOXIC BY INHALATION LIQUID, WATER-REACTIVE, FLAMMABLE, N.O.S. with an inhalation toxicity lower than or equal to 200 ml/m³ and saturated vapour concentration greater than or equal to 500 LC_{50}
		3491	TOXIC BY INHALATION LIQUID, WATER-REACTIVE, FLAMMABLE, N.O.S. with an inhalation toxicity lower than or equal to 1000 ml/m³ and saturated vapour concentration greater than or equal to 10 LC_{50}

Section 2.2.62

2.2.62.1.3 Delete the definition of "Genetically modified microorganisms and organisms".

Section 2.2.7

2.2.7.1.3 In the definition of "***Fissile material***", amend the text before sub-paragraphs (a) and (b) to read:

"***Fissile nuclides*** means uranium-233, uranium-235, plutonium-239 and plutonium-241. ***Fissile material*** means a material containing any of the fissile nuclides. Excluded from the definition of fissile material are:".

2.2.7.2.2.1 In the table, under "Kr-79", in the third column, replace "1 x 10^0" with:

"2 x 10^0".

2.2.7.2.3.1.2 In paragraph (a) (ii), replace "providing they" by:

"that".

In paragraphs (a) (iii) and (iv), replace "excluding material classified as fissile according to 2.2.7.2.3.5" with:

"excluding fissile material not excepted under 2.2.7.2.3.5".

In paragraph (c) at the beginning, insert after "excluding powders,":

"meeting the requirements of 2.2.7.2.3.1.3,".

2.2.7.2.3.4.1 In the second sentence, insert after "package":

", taking into account the provisions of 6.4.8.14,".

2.2.7.2.3.5 Amend the introductory sentence before sub-paragraph (a) to read as follows:

"Packages containing fissile material shall be classified under the relevant entry of Table 2.2.7.2.1.1, the description of which includes the words "FISSILE" or "fissile-excepted". Classification as "fissile-excepted" is allowed only if one of the conditions (a) to (d) of this paragraph is met. Only one type of exception is allowed per consignment (see also 6.4.7.2)."

Amend paragraph (a) to read as follows:

"(a) A mass limit per consignment, provided that the smallest external dimension of each package is not less than 10 cm, such that:

$$\frac{\text{mass of uranium} - 235\,(\text{g})}{X} + \frac{\text{mass of other fissile material}\,(\text{g})}{Y} < 1$$

where X and Y are the mass limits defined in Table 2.2.7.2.3.5, provided that either:

(i) each individual package contains not more than 15 g of fissile nuclides; for unpackaged material, this quantity limitation shall apply to the consignment being carried in or on the conveyance; or

(ii) the fissile material is a homogeneous hydrogenous solution or mixture where the ratio of fissile nuclides to hydrogen is less than 5% by mass; or

(iii) there are not more than 5 g of fissile nuclides in any 10 litre volume of material.

Beryllium shall not be present in quantities exceeding 1% of the applicable consignment mass limits provided in Table 2.2.7.2.3.5 except where the concentration of beryllium in the material does not exceed 1 gram beryllium in any 1 000 grams.

Deuterium shall also not be present in quantities exceeding 1% of the applicable consignment mass limits provided in Table 2.2.7.2.3.5 except where deuterium occurs up to natural concentration in hydrogen."

In paragraph (b), replace "fissile material is" by "fissile nuclides are".

Amend paragraph (d) to read as follows:

"(d) Plutonium containing not more than 20% of fissile nuclides by mass up to a maximum of 1 kg of plutonium per consignment. Shipments under this exception shall be under exclusive use."

2.2.7.2.4.1.1 In paragraphs (b) and (d), add:

"as specified in Table 2.2.7.2.4.1.2".

2.2.7.2.4.1.3 In the first sentence before sub-paragraph (a), replace "provided that" with:

"only if".

2.2.7.2.4.1.4 At the beginning, replace "Radioactive material with an activity not exceeding the limit" with:

"Radioactive material in forms other than as specified in 2.2.7.2.4.1.3 and with an activity not exceeding the limits".

2.2.7.2.4.1.5 In the first sentence, delete:

"with an activity not exceeding the limit specified in column 4 of Table 2.2.7.2.4.1.2".

In the first sentence, replace "provided that" with:

"only if".

2.2.7.2.4.1.6 [The first amendment in the French version does not apply to the English text.]

At the end, replace "provided that" with "only if".

2.2.7.2.4.2 Replace "if the conditions of 2.2.7.2.3.1 and 4.1.9.2 are met" with:

"if the definition of LSA in 2.2.7.1.3 and the conditions of 2.2.7.2.3.1, 4.1.9.2 and 7.5.11 CW 33 (2) are met".

2.2.7.2.4.3 Replace "if the conditions of 2.2.7.2.3.2 and 4.1.9.2 are met" with:

"if the definition of SCO in 2.2.7.1.3 and the conditions of 2.2.7.2.3.2, 4.1.9.2 and 7.5.11 CW 33 (2) are met".

Section 2.2.8

2.2.8.1.6 At the end of the second sub-paragraph, replace "OECD Guideline 404[7]" with:

"OECD Test Guideline 404[7] or 435[8]. A substance which is determined not to be corrosive in accordance with OECD Test Guideline 430[9] or 431[10] may be considered not to be corrosive to skin for the purposes of RID without further testing."

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[7] OECD Guideline for the testing of chemicals No. 404 "Acute Dermal Irritation/Corrosion" 2002.

[8] OECD Guideline for the testing of chemicals No. 435 "In Vitro Membrane Barrier Test Method for Skin Corrosion" 2006.

[9] OECD Guideline for the testing of chemicals No. 430 "In Vitro Skin Corrosion: Transcutaneous Electrical Resistance Test (TER)" 2004.

[10] OECD Guideline for the testing of chemicals No. 431 "In Vitro Skin Corrosion: Human Skin Model Test" 2004.

2.2.8.1.9 Footnotes 8 and 9 become footnotes 11 and 12.

Section 2.2.9

2.2.9.1.1 [This amendment does not apply to the English text.]

2.2.9.1.10.1.2 Footnote 10 becomes footnote 13.

2.2.9.1.10.1.3 Footnote 11 becomes footnote 14.

2.2.9.1.10.1.4 [The two first amendments in the French version do not apply to the English text.]

Amend the definition of "NOEC" to read as follows:

"– NOEC (No Observed Effect Concentration): the test concentration immediately below the lowest tested concentration with statistically significant adverse effect. The NOEC has no statistically significant adverse effect compared to the control;".

[The fourth amendment does not apply to the English text.]

After the definition of "GLP", add the following new definition:

"– EC_x: the concentration associated with x% response;".

2.2.9.1.10.2.1 Rearrange the indents to read as follows:

"(a) Acute aquatic toxicity;

(b) Chronic aquatic toxicity;

(c) Potential for or actual bioaccumulation; and

(d) Degradation (biotic or abiotic) for organic chemicals."

2.2.9.1.10.2.3 At the beginning, add the following two new paragraphs:

"**Acute aquatic toxicity** means the intrinsic property of a substance to be injurious to an organism in a short-term aquatic exposure to that substance.

Acute (short-term) hazard, for classification purposes, means the hazard of a chemical caused by its acute toxicity to an organism during short-term aquatic exposure to that chemical."

The existing text becomes the new third paragraph.

2.2.9.1.10.2.4 [Text of existing 2.2.9.1.10.2.6, with the following modifications:]

At the beginning, add the following two new paragraphs:

"**Chronic aquatic toxicity** means the intrinsic property of a substance to cause adverse effects to aquatic organisms during aquatic exposures which are determined in relation to the life-cycle of the organism.

Long-term hazard, for classification purposes, means the hazard of a chemical caused by its chronic toxicity following long-term exposure in the aquatic environment."

The existing text becomes the new third paragraph.

Amend the last sentence to read as follows:

"The NOECs or other equivalent ECx shall be used."

2.2.9.1.10.2.5 [Text of existing 2.2.9.1.10.2.4. The modifications do not apply to the English text.]

2.2.9.1.10.2.6 [Text of existing 2.2.9.1.10.2.5, with the following modifications:]

At the beginning, add the following new paragraph:

"**Degradation** means the decomposition of organic molecules to smaller molecules and eventually to carbon dioxide, water and salts."

In the second sentence of the new second paragraph, replace "OECD biodegradability tests (OECD Test Guideline 301 (A - F))" with:

"biodegradability tests (A-F) of OECD Test Guideline 301".

[The amendments to the fourth sentence of the new second paragraph and the last sentence of the new third paragraph do not apply to the English text.]

In sub-paragraph (a), at the end, after "has been degraded", insert the following text:

", unless the substance is identified as a complex, multi-component substance with structurally similar constituents. In this case, and where there is sufficient justification, the 10-day window condition may be waived and the pass level applied at 28 days[15]."

[15] See Chapter 4.1 and Annex 9, paragraph A9.4.2.2.3 of the GHS.

2.2.9.1.10.3 Amend to read as follows:

"**2.2.9.1.10.3 Substance classification categories and criteria**

2.2.9.1.10.3.1 Substances shall be classified as "environmentally hazardous substances (aquatic environment)", if they satisfy the criteria for Acute 1, Chronic 1 or Chronic 2, according to Table 2.2.9.1.10.3.1. These criteria describe in detail the classification categories. They are diagrammatically summarized in Table 2.2.9.1.10.3.2.

Table 2.2.9.1.10.3.1: Categories for substances hazardous to the aquatic environment (see Note 1)

(a) Acute (short-term) aquatic hazard

Category Acute 1: (see Note 2)	
96 hr LC_{50} (for fish)	≤ 1 mg/l and/or
48 hr EC_{50} (for crustacea)	≤ 1 mg/l and/or
72 or 96hr ErC_{50} (for algae or other aquatic plants)	≤ 1 mg/l (see Note 3)

(b) Long-term aquatic hazard (see also Figure 2.2.9.1.10.3.1)

(i) Non-rapidly degradable substances (see Note 4) for which there are adequate chronic toxicity data available

Category Chronic 1: (see Note 2)	
Chronic NOEC or EC_x (for fish)	≤ 0.1 mg/l and/or
Chronic NOEC or EC_x (for crustacea)	≤ 0.1 mg/l and/or
Chronic NOEC or EC_x (for algae or other aquatic plants)	≤ 0.1 mg/l
Category Chronic 2:	
Chronic NOEC or EC_x (for fish)	≤ 1 mg/l and/or
Chronic NOEC or EC_x (for crustacea)	≤ 1 mg/l and/or
Chronic NOEC or EC_x (for algae or other aquatic plants)	≤ 1 mg/l

(ii) Rapidly degradable substances for which there are adequate chronic toxicity data available

Category Chronic 1: (see Note 2)

Chronic NOEC or EC_x (for fish)	≤ 0.01 mg/l and/or
Chronic NOEC or EC_x (for crustacea)	≤ 0.01 mg/l and/or
Chronic NOEC or EC_x (for algae or other aquatic plants)	≤ 0.01 mg/l

Category Chronic 2:

Chronic NOEC or EC_x (for fish)	≤ 0.1 mg/l and/or
Chronic NOEC or EC_x (for crustacea)	≤ 0.1 mg/l and/or
Chronic NOEC or EC_x (for algae or other aquatic plants)	≤ 0.1 mg/l

(iii) Substances for which adequate chronic toxicity data are not available

Category Chronic 1: (see Note 2)

96 hr LC_{50} (for fish)	≤ 1 mg/l and/or
48 hr EC_{50} (for crustacea)	≤ 1 mg/l and/or
72 or 96hr ErC_{50} (for algae or other aquatic plants)	≤ 1 mg/l (see Note 3)

and the substance is not rapidly degradable and/or the experimentally determined BCF is ≥ 500 (or, if absent the log K_{ow} ≥ 4) (see Notes 4 and 5).

Category Chronic 2:

96 hr LC_{50} (for fish)	> 1 bis ≤ 10 mg/l and/or
48 hr EC_{50} (for crustacea)	> 1 bis ≤ 10 mg/l and/or
72 or 96hr ErC_{50} (for algae or other aquatic plants)	> 1 bis ≤ 10 mg/l (see Note 3)

and the substance is not rapidly degradable and/or the experimentally determined BCF is ≥ 500 (or, if absent the log K_{ow} ≥ 4 (see Notes 4 and 5).

NOTE 1: The organisms fish, crustacea and algae are tested as surrogate species covering a range of trophic levels and taxa, and the test methods are highly standardized. Data on other organisms may also be considered, however, provided they represent equivalent species and test endpoints.

2: When classifying substances as Acute 1 and/or Chronic 1 it is necessary at the same time to indicate an appropriate M factor (see 2.2.9.1.10.4.6.4) to apply the summation method.

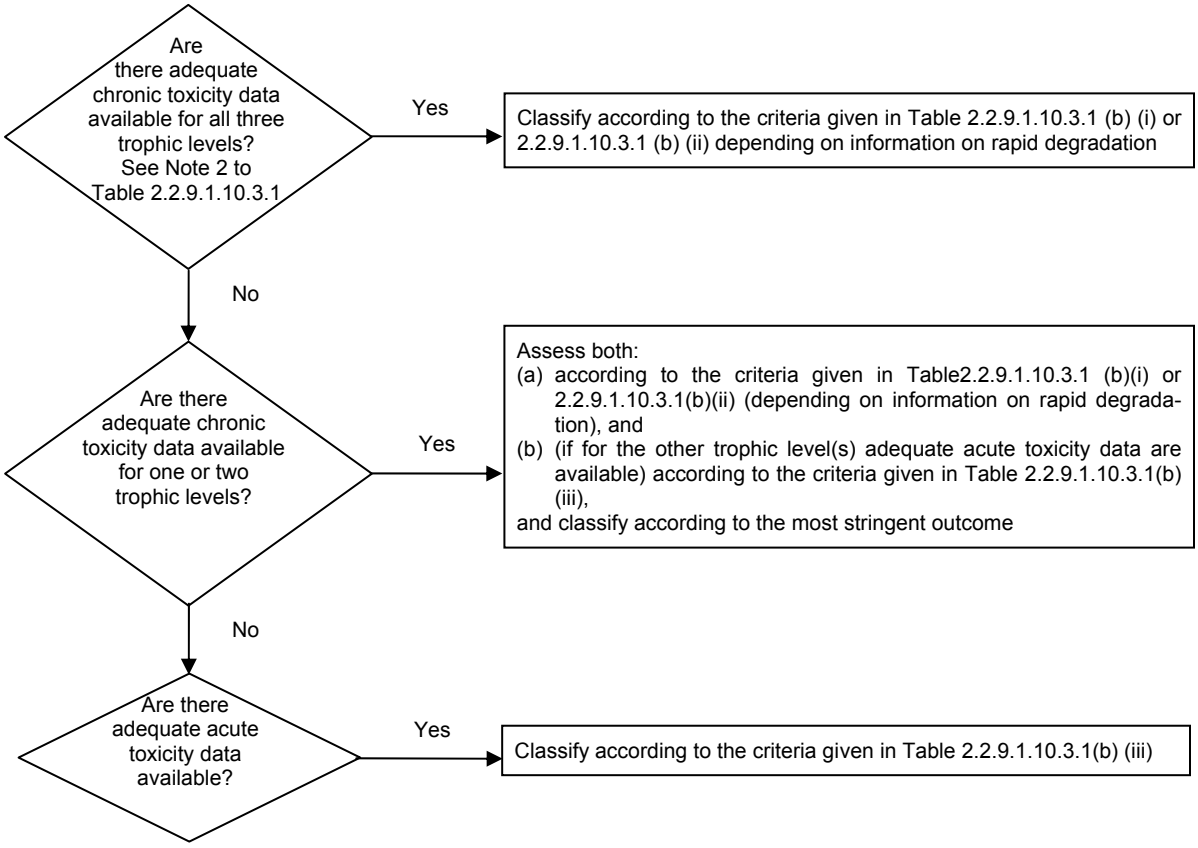
3: Where the algal toxicity ErC_{50} (= EC_{50} (growth rate)) falls more than 100 times below the next most sensitive species and results in a classification based solely on this effect, consideration shall be given to whether this toxicity is representative of the toxicity to aquatic plants. Where it can be shown that this is not the case, professional judgment shall be used in deciding if classification shall be applied. Classification shall be based on the ErC_{50}. In circumstances where the basis of the EC_{50} is not specified and no

ErC_{50} is recorded, classification shall be based on the lowest EC_{50} available.

4: Lack of rapid degradability is based on either a lack of ready biodegradability or other evidence of lack of rapid degradation. When no useful data on degradability are available, either experimentally determined or estimated data, the substance shall be regarded as not rapidly degradable.

5: Potential to bioaccumulate, based on an experimentally derived BCF $\geq$ 500 or, if absent, a log $K_{ow} \geq 4$ provided log K_{ow} is an appropriate descriptor for the bioaccumulation potential of the substance. Measured log K_{ow} values take precedence over estimated values and measured BCF values take precedence over log K_{ow} values.

Figure 2.2.9.1.10.3.1: Categories for substances long-term hazardous to the aquatic environment



2.2.9.1.10.3.2 The classification scheme in Table 2.2.9.1.10.3.2 below summarizes the classification criteria for substances.

Table 2.2.9.1.10.3.2: Classification scheme for substances hazardous to the aquatic environment

Classification categories			
Acute hazard (see Note 1)	**Long-term hazard** (see Note 2)		
	Adequate chronic toxicity data available		**Adequate chronic toxicity data not available** (see Note 1)
	Non-rapidly degradable substances (see Note 3)	**Rapidly degradable substances** (see Note 3)	
Category: Acute 1	**Category: Chronic 1**	**Category: Chronic 1**	**Category: Chronic 1**
$L(E)C_{50} \leq 1.00$	NOEC or $EC_x \leq 0.1$	NOEC or $EC_x \leq 0.01$	$L(E)C_{50} \leq 1.00$ and lack of rapid degradability and/or BCF ≥ 500 or, if absent log $K_{ow} \geq 4$
	Category: Chronic 2	**Category: Chronic 2**	**Category: Chronic 2**
	$0.1 < NOEC$ or $EC_x \leq 0.1$	$0.01 < NOEC$ or $EC_x \leq 0.1$	$1.00 < L(E)C_{50} \leq 10.0$ and lack of rapid degradability and/or BCF ≥ 500 or, if absent log $K_{ow} \geq 4$

NOTE 1: Acute toxicity band based on $L(E)C_{50}$ values in mg/l for fish, crustacea and/or algae or other aquatic plants (or Quantitative Structure Activity Relationships (QSAR) estimation if no experimental data[16]).

2: Substances are classified in the various chronic categories unless there are adequate chronic toxicity data available for all three trophic levels above the water solubility or above 1 mg/l. ("Adequate" means that the data sufficiently cover the endpoint of concern. Generally this would mean measured test data, but in order to avoid unnecessary testing it can on a case by case basis also be estimated data, e.g. (Q)SAR, or for obvious cases expert judgment).

3: Chronic toxicity band based on NOEC or equivalent EC_x values in mg/l for fish or crustacea or other recognized measures for chronic toxicity.

[16] Special guidance is provided in Chapter 4.1, paragraph 4.1.2.13 and Annex 9, Section A9.6 of the GHS.

2.2.9.1.10.4.1 In the first sentence, replace "meaning acute category 1 and chronic categories 1 and 2" with:

", meaning categories Acute 1 and Chronic 1 and 2".

[The amendment to the second sentence does not apply to the English text.]

Amend the second paragraph to read as follows:

"The "relevant ingredients" of a mixture are those which are present in a concentration equal to or greater than 0.1% (by mass) for ingredients classified as Acute and/or Chronic 1 and equal to or greater than 1% for other ingredients, unless there is a presumption (e.g. in the case of highly toxic ingredients) that an ingredient present at less than 0.1% can still be relevant for classifying the mixture for aquatic environmental hazards."

2.2.9.1.10.4.2 In the heading of the figure, replace "chronic" with "long-term".

In the figure, in the middle column, modify the three bullet points to read them as sub-paragraphs (a), (b) and (c).

In the new sub-paragraph (c), replace "formula" with "formulas" and insert "or EqNOECm" after "$L(E)C_{50}$" and "or "Chronic"" after ""Acute"". In the right column, replace "chronic toxicity" with "long-term" (four times).

2.2.9.1.10.4.3 Amend to read as follows:

"**2.2.9.1.10.4.3** Classification of mixtures when toxicity data are available for the complete mixture

2.2.9.1.10.4.3.1 When the mixture as a whole has been tested to determine its aquatic toxicity, this information shall be used for classifying the mixture according to the criteria that have been agreed for substances. The classification is normally based on the data for fish, crustacea and algae/plants (see 2.2.9.1.10.2.3and 2.2.9.1.10.2.4). When adequate acute or chronic data for the mixture as a whole are lacking, "bridging principles" or "summation method" shall be applied (see 2.2.9.1.10.4.4 and 2.2.9.1.10.4.5).

2.2.9.1.10.4.3.2 The long-term hazard classification of mixtures requires additional information on degradability and in certain cases bioaccumulation. There are no degradability and bioaccumulation data for mixtures as a whole. Degradability and bioaccumulation tests for mixtures are not used as they are usually difficult to interpret, and such tests may be meaningful only for single substances.

2.2.9.1.10.4.3.3 Classification for category Acute 1

(a) When there are adequate acute toxicity test data (LC_{50} or EC_{50}) available for the mixture as a whole showing $L(E)C_{50} \leq 1$ mg/l:

Classify the mixture as Acute 1 in accordance with Table 2.2.9.1.10.3.1 (a);

(b) When there are acute toxicity test data (LC_{50}(s) or EC_{50}(s) available for the mixture as a whole showing $L(E)C_{50}$(s) > 1 mg/l, or above the water solubility:

No need to classify for acute hazard under RID.

2.2.9.1.10.4.3.4 Classification for categories Chronic 1 and 2

(a) When there are adequate chronic toxicity data (EC_x or NOEC) available for the mixture as a whole showing EC_x or NOEC of the tested mixture ≤ 1mg/l:

(i) classify the mixture as Chronic 1 or 2 in accordance with Table 2.2.9.1.10.3.1 (b) (ii) (rapidly degradable) if the available information allows the conclusion that all relevant ingredients of the mixture are rapidly degradable;

(ii) classify the mixture as Chronic 1 or 2 in all other cases in accordance with Table 2.2.9.1.10.3.1 (b) (i) (non-rapidly degradable);

(b) When there are adequate chronic toxicity data (EC_x or NOEC) available for the mixture as a whole showing EC_x(s) or NOEC(s) of the tested mixture > 1mg/l or above the water solubility:

No need to classify for long-term hazard under RID."

2.2.9.1.10.4.4 Amend the heading to read as follows:

"Classification of mixtures when toxicity data are not available for the complete mixture: bridging principles".

2.2.9.1.10.4.4.2 Amend to read as follows:

"**2.2.9.1.10.4.4.2** Dilution

Where a new mixture is formed by diluting a tested mixture or a substance with a diluent which has an equivalent or lower aquatic hazard classification than the least toxic original ingredient and which is not expected to affect the aquatic hazards of other ingredients, then the resulting mixture shall be classified as equivalent to the original tested mixture or substance. Alternatively, the method explained in 2.2.9.1.10.4.5 may be applied."

2.2.9.1.10.4.4.3 At the beginning, replace "one production batch of a complex mixture" with "a tested production batch of a mixture". Insert "untested" after "another" and replace "and produced" with "when produced". At the end of the first sentence, insert "untested" before "batch".

2.2.9.1.10.4.4.4 [The first amendment does not apply to the English text.]

At the beginning, replace "If a mixture" with "If a tested mixture" and insert "the" before "ingredients". Insert "untested" after "concentrated" and "tested" after "original".

2.2.9.1.10.4.4.5 Amend the text after the heading to read as follows:

"For three mixtures (A, B and C) with identical ingredients, where mixtures A and B have been tested and are in the same toxicity category, and where untested mixture C has the same toxicologically active ingredients as mixtures A and B but has concentrations of toxicologically active ingredients intermediate to the concentrations in mixtures A and B, then mixture C is assumed to be in the same category as A and B."

2.2.9.1.10.4.4.6 In sub-paragraph (b), insert "essentially" before "the same".

In sub-paragraph (d), replace "Classification" with "Data on aquatic hazards" and "the same" with "substantially equivalent".

Amend the text after sub-paragraph (d) to read as follows:

"If mixture (i) or (ii) is already classified based on test data, then the other mixture can be assigned the same hazard category."

2.2.9.1.10.4.5 In the heading, insert "toxicity" before "data".

2.2.9.1.10.4.5.2 Amend to read as follows:

"**2.2.9.1.10.4.5.2** Mixtures may be made of a combination of both ingredients that are classified (as Acute 1 and/or Chronic 1, 2) and those for which adequate toxicity test data are available. When adequate toxicity data are available for more than one ingredient in the mixture, the combined toxicity of those ingredients shall be calculated using the following additivity formulas (a) or (b), depending on the nature of the toxicity data:

(a) Based on acute aquatic toxicity:

$$\frac{\sum C_i}{L(E)C_{50m}} = \sum_n \frac{C_i}{L(E)C_{50i}}$$

where:

C_i = concentration of ingredient i (mass percentage);

$L(E)C_{50i}$ = LC_{50} or EC_{50} for ingredient i (mg/l);

n = number of ingredients, and i is running from 1 to n;

$L(E)C_{50m}$ = $L(E)C_{50}$ of the part of the mixture with test data;

The calculated toxicity shall be used to assign that portion of the mixture an acute hazard category which is then subsequently used in applying the summation method;

(b) Based on chronic aquatic toxicity:

$$\frac{\sum C_i + \sum C_j}{EqNOEC_m} = \sum_n \frac{C_i}{NOEC_i} + \sum_n \frac{C_j}{0{,}1 \cdot NOEC_j}$$

where:

C_i = concentration of ingredient i (mass percentage) covering the rapidly degradable ingredients;

C_j = concentration of ingredient j (mass percentage) covering the non-rapidly degradable ingredients;

$NOEC_i$ = NOEC (or other recognized measures for chronic toxicity) for ingredient i covering the rapidly degradable ingredients, in mg/l;

$NOEC_j$ = NOEC (or other recognized measures for chronic toxicity) for ingredient j covering the non-rapidly degradable ingredients, in mg/l;

n = number of ingredients, and i and j are running from 1 to n;

$EqNOEC_m$ = equivalent NOEC of the part of the mixture with test data;

The equivalent toxicity thus reflects the fact that non-rapidly degrading substances are classified one hazard category level more "severe" than rapidly degrading substances.

The calculated equivalent toxicity shall be used to assign that portion of the mixture a long-term hazard category, in accordance with the criteria for rapidly degradable substances (Table 2.2.9.1.10.3.1 (b) (ii)), which is then subsequently used in applying the summation method."

2.2.9.1.10.4.5.3 In the first sentence, replace "each substance" with "each ingredient", "same species" with "same taxonomic group", "daphnia" with "crustacea" and "three species" with "three groups". In the second sentence, replace "species" with "taxonomic group". In the last sentence, insert "and chronic" before "toxicity" and "and/or Chronic 1 or 2" after "Acute 1".

2.2.9.1.10.4.6.1 [This amendment in the French version does not apply to the English text.]

2.2.9.1.10.4.6.2 Amend the heading to read:

"Classification for category Acute 1".

2.2.9.1.10.4.6.2.1 In the first sentence, replace "All" with "First, all" and "shall be" with "are".

In the second sentence, insert "the concentrations (in %) of" before "these ingredients". Delete "category" (twice).

2.2.9.1.10.4.6.2.2 Amend to read as follows:

"**2.2.9.1.10.4.6.2.2** The classification of mixtures for acute hazards based on this summation of the concentrations of classified ingredients is summarized in Table 2.2.9.1.10.4.6.2.2 below.

Table 2.2.9.1.10.4.6.2.2: Classification of a mixture for acute hazards based on summation of the concentrations of classified ingredients

Sum of the concentrations (in %) of ingredients classified as:	Mixture classified as:
Acute 1 x M[a] ≥ 25%	Acute 1

[a] For explanation of the M factor, see 2.2.9.1.10.4.6.4."

2.2.9.1.10.4.6.3 Amend the heading to read:

"Classification for categories Chronic 1 and 2".

2.2.9.1.10.4.6.3.1 [The first amendment in the French version does not apply to the English text.]

In the second sentence, insert "the concentrations (in %) of" before "these ingredients".

In the second sentence, delete "category" (twice).

2.2.9.1.10.4.6.3.2 Insert "the concentrations (in %) of" after "the sum of" (twice).

2.2.9.1.10.4.6.3.3 Amend to read as follows:

"**2.2.9.1.10.4.6.3.3** The classification of mixtures for long-term hazards based on this summation of the concentrations of classified ingredients is summarized in Table 2.2.9.1.10.4.6.3.3 below.

Table 2.2.9.1.10.4.6.3.3: Classification of a mixture for long-term hazards based on summation of the concentrations of classified ingredients

Sum of the concentrations (in %) of ingredients classified as:	Mixture classified as:
Chronic 1 x M[a] ≥ 25%	Chronic 1
(M x 10 x Chronic 1) + Chronic 2 ≥ 25%	Chronic 2

[a] For explanation of the M factor, see 2.2.9.1.10.4.6.4."

2.2.9.1.10.4.6.4 In the first sentence after the heading, replace "Category acute 1 ingredients with toxicities well below 1 mg/l may influence" with:

"Acute 1 or Chronic 1 ingredients with acute toxicities well below 1 mg/l and/or chronic toxicities well below 0.1 mg/l (if non-rapidly degradable) and 0.01 mg/l (if rapidly degradable) may influence".

In the second sentence, insert "and Chronic 1" after "the concentrations of Acute 1".

In the last sentence, insert "and/or chronic" after "specific acute".

Replace Table 2.2.9.1.10.4.6.4 with the following table:

"**Table 2.2.9.1.10.4.6.4: Multiplying factors for highly toxic ingredients of mixtures**

Acute toxicity	**M factor**	**Chronische Toxicity**	**M factor**	
$L(E)C_{50}$ value		**NOEC value**	**NRD[a] ingredients**	**RD[b] ingredients**
$0.1 < L(E)C_{50} \leq 1$	1	$0.01 < NOEC \leq 0.1$	1	–
$0.01 < L(E)C_{50} \leq 0.1$	10	$0.001 < NOEC \leq 0.01$	10	1
$0.001 < L(E)C_{50} \leq 0.01$	100	$0.0001 < NOEC \leq 0.0001$	100	10
$0.0001 < L(E)C_{50} \leq 0.001$	1000	$0.00001 < NOEC \leq 0.00001$	1000	100
$0.00001 < L(E)C_{50} \leq 0.0001$	10000	$0.000001 < NOEC \leq 0.00001$	10000	1000
(continue in factor 10 intervals)		(continue in factor 10 intervals)		

[a] Non-rapidly degradable.
[b] Rapidly degradable."

2.2.9.1.10.4.6.5 In the first sentence, replace "aquatic hazard" with "aquatic toxicity".

2.2.9.1.10.5.2 Footnotes 13 and 14 become footnotes 17 and 18.

Add the following text at the end:

"unless they are classified as not environmentally hazardous according to Regulation 1272/2008/EC[19]

[19] Regulation 1272/2008/EC of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (Official Journal of the European Communities No. L 353 of 30 December2008)."

2.2.9.1.11 In the second sentence, insert before "of infectious substances":

"of toxic substances or".

In Note 3, add the following sentence at the end:

"Genetically modified live animals shall be carried under terms and conditions of the competent authorities of the countries of origin and destination."

Footnote 15 becomes footnote 20.

2.2.9.1.14 In the Note, amend the proper shipping name of UN No. 3166 to read:

"UN No. 3166 ENGINE, INTERNAL COMBUSTION or 3166 VEHICLE, FLAMMABLE GAS POWERED or 3166 VEHICLE, FLAMMABLE LIQUID POWERED or 3166 ENGINE, FUEL CELL, FLAMMABLE GAS POWERED or 3166 ENGINE, FUEL CELL, FLAMMABLE LIQUID POWERED or 3166 VEHICLE, FUEL CELL, FLAMMABLE GAS POWERED or 3166 VEHICLE, FUEL CELL, FLAMMABLE LIQUID POWERED".

2.2.9.3 Under classification code "M8", insert before "GENETICALLY MODIFIED ORGANISMS":

"3245".

Under classification code "M11", amend "FUMIGATED UNIT" to read:

"FUMIGATED CARGO TRANSPORT UNIT".

Chapter 2.3

2.3.3.1 Amend to read as follows:

"**2.3.3.1 Determination of flash-point**

2.3.3.1.1 The following methods for determining the flash-point of flammable liquids may be used:

International standards:

ISO 1516 (Determination of flash/no flash – Closed cup equilibrium method)
ISO 1523 (Determination of flash point – Closed cup equilibrium method)
ISO 2719 (Determination of flash point – Pensky-Martens closed cup method)

ISO 13736 (Determination of flash point – Abel closed-cup method)
ISO 3679 (Determination of flash point – Rapid equilibrium closed cup method)
ISO 3680 (Determination of flash/no flash – Rapid equilibrium closed cup method)

National standards:

American Society for Testing Materials International, 100 Barr Harbor Drive, PO Box C700, West Conshohocken, Pennsylvania, USA 19428-2959:

ASTM D3828-07a, Standard Test Methods for Flash Point by Small Scale Closed-Cup Tester
ASTM D56-05, Standard Test Method for Flash Point by Tag Closed-Cup Tester
ASTM D3278-96(2004)e1, Standard Test Methods for Flash Point of Liquids by Small Scale Closed-Cup Apparatus
ASTM D93-08, Standard Test Methods for Flash Point by Pensky-Martens Closed-Cup Tester

Association française de normalisation, AFNOR, 11, rue de Pressensé, F-93571 La Plaine Saint-Denis Cedex:

French Standard NF M 07 - 019
French Standards NF M 07 - 011 / NF T 30 - 050 / NF T 66 - 009
French Standard NF M 07 - 036

Deutsches Institut für Normung, Burggrafenstraße 6, D-10787 Berlin:

Standard DIN 51755 (flash-points below 65 °C)

State Committee of the Council of Ministers for Standardization, RUS-113813, GSP, Moscow, M-49 Leninsky Prospect, 9:

GOST 12.1.044-84

2.3.3.1.2 [Existing text of 2.3.3.1.2 with the following modification:]

Amend sub-paragraph (d) to read as follows:

"(d) International Standards EN ISO 13736 and EN ISO 2719, Method B."

2.3.3.1.3 [Existing text of 2.3.3.1.6 with the following modifications:]

Amend the first sentence to read:

"The standards listed in 2.3.3.1.1 shall only be used for flash-point ranges which are specified therein."

In the second sentence, replace "the method" with:

"the standard".

2.3.3.1.4 [Existing text of 2.3.3.1.7 with the following modification:]

Delete:

"in accordance with 2.3.3.1.5" and "in accordance with 2.3.3.1.4".

2.3.3.1.5 [Existing text of 2.3.3.1.8.]"

2.3.3.2 Becomes **2.3.3.3**.

Insert a new sub-section 2.3.3.2 to read as follows:

"**2.3.3.2 Determination of initial boiling point**

The following methods for determining the initial boiling point of flammable liquids may be used:

International standards:

[ISO 3924 (Petroleum products – Determination of boiling range distribution – Gas chromatography method)**]**
ISO 4626 (Volatile organic liquids – Determination of boiling range of organic solvents used as raw materials)
ISO 3405 (Petroleum products – Determination of distillation characteristics at atmospheric pressure)

National standards:

American Society for Testing Materials International, 100 Barr Harbor Drive, PO Box C700, West Conshohocken, Pennsylvania, USA 19428-2959:

ASTM D86-07a, Standard Test Method for Distillation of Petroleum Products at Atmospheric Pressure
ASTM D1078-05, Standard Test Method for Distillation Range of Volatile Organic Liquids

Further acceptable methods:

Method A.2 as described in Part A of the Annex to Commission Regulation (EC) No 440/2008[1].

[1] Commission Regulation (EC) No 440/2008 of 30 May 2008 laying down test methods pursuant to Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (Official Journal of the European Union, No. L 142 of 31 May 2008, p.1-739 and No. L 143 of 3 June 2008, p.55).

PART 3

Chapter 3.1

3.1.2.8.1 In the first sentence, insert after "special provision 274":

"or 318".

3.1.2.8.1.1 In the first sentence, replace ", if relevant a biological name," with:

"or biological name,".

3.1.2.8.1.2 [This amendment in the German version does not apply to the English text.]

3.1.2.9 Delete.

Add a new 3.1.3 to read as follows:

"**3.1.3 Solutions or mixtures**

NOTE: Where a substance is specifically mentioned by name in Table A of Chapter 3.2, it shall be identified in carriage by the proper shipping name in Column (2) of Table A of Chapter 3.2. Such substances may contain technical impurities (for example those deriving from the production process) or additives for stability or other purposes that do not affect its classification. However, a substance mentioned by name containing technical impurities or additives for stability or other purposes affecting its classification shall be considered a solution or mixture (see 2.1.3.3).

3.1.3.1 A solution or mixture is not subject to RID if the characteristics, properties, form or physical state of the solution or mixture are such that it does not meet the criteria, including human experience criteria, for inclusion in any class.

3.1.3.2 A solution or mixture composed of a single predominant substance mentioned by name in Table A of Chapter 3.2 and one or more substances not subject to RID and/or traces of one or more substances mentioned by name in Table A of Chapter 3.2, shall be assigned the UN number and proper shipping name of the predominant substance mentioned by name in Table A of Chapter 3.2 unless:

(a) The solution or mixture is mentioned by name in Table A of Chapter 3.2;

(b) The name and description of the substance mentioned by name in Table A of Chapter 3.2 specifically indicate that they apply only to the pure substance;

(c) The class, classification code, packing group, or physical state of the solution or mixture is different from that of the substance mentioned by name in Table A of Chapter 3.2; or

(d) The hazard characteristics and properties of the solution or mixture necessitate emergency response measures that are different from those required for the substance mentioned by name in Table A of Chapter 3.2.

Qualifying words such as "SOLUTION" or "MIXTURE", as appropriate, shall be added as part of the proper shipping name, for example, "ACETONE SOLUTION". In addition, the concentration of the mixture or solution may also be indicated after the basic description of the mixture or solution, for example, "ACETONE 75% SOLUTION".

3.1.3.3 A solution or mixture that is not mentioned by name in Table A of Chapter 3.2 and that is composed of two or more dangerous goods shall be assigned to an entry that has the proper shipping name, description, class, classification code and packing group that most precisely describe the solution or mixture."

Chapter 3.2

3.2.1 Amend the explanatory note for column (7a) to read as follows:

"**Column (7a) "Limited Quantities"**

Provides the maximum quantity per inner packaging or article for carrying dangerous goods as limited quantities in accordance with Chapter 3.4."

Table A

In **column (7a)**, add the maximum quantity per inner packaging or article for carrying dangerous goods as limited quantities, as given in Chapter 3.2 of the UN Recommendations on the Transport of Dangerous Goods, Model Regulations, sixteenth revised edition (document ST/SG/AC.10/1/Rev.16).

In **column (7a)**, delete alphanumeric codes LQ wherever they appear.

[In **column (13)**, insert "TE xx" in the following cases:

– for tanks for gases of Class 2 with classification codes containing the letter(s) F, T, TF, TC, TO, TFC or TOC, and

– for tanks for substances of classes 3 to 8 with tank code L10BH, L10CH, L10DH, L15CH, L15DH or L21DH.**]**

In **column (16)**, delete "W12" wherever it appears.

For all entries for which the code "IBC 100" is allocated in column (8) and for all entries of packing group III for which the code IBC 03 is allocated in column (8), insert in **column (16)**:

"W12".

UN No.	**Column**	**Amendment**
0323	(6)	Insert: "347".
0366	(6)	Insert: "347".
0441	(6)	Insert: "347".
0445	(6)	Insert: "347".
0455	(6)	Insert: "347".
0456	(6)	Insert: "347".
0460	(6)	Insert: "347".
0500	(6)	Insert: "347".
1002	(6)	Insert: "655".
1040	(6)	Insert: "342" (twice).
1002	(6)	Delete: "292".
1066	(6)	Insert: "653.
1072	(6)	Insert: "355".
1092	(6)	Insert: "354".
	(7b)	Replace "E5" with: "E0".

UN No.	Col-umn	Amendment
1098	(6)	Insert: "354".
	(7b)	Replace "E5" with: "E0".
1135	(6)	Insert: "354".
	(7b)	Replace "E5" with: "E0".
	(8)	Replace "P001" with: "P602".
	(10)	Replace "T14" with: "T20".
	(11)	Add: "TP37".
1143	(6)	Add: "354".
	(7b)	Replace "E5" with: "E0".
	(8)	Replace "P001" with: "P602".
1163	(6)	Insert: "354".
	(7b)	Replace "E5" with: "E0".
1182	(6)	Insert: "354".
	(7b)	Replace "E5" with: "E0".
	(10)	Replace "T14" with: "T20".
	(11)	Add: "TP37".
1185	(6)	Insert: "354".
	(7b)	Replace "E5" with: "E0".
1238	(6)	Insert: "354".
	(7b)	Replace "E5" with: "E0".
1239	(6)	Insert: "354".
	(7b)	Replace "E5" with: "E0".
1244	(6)	Insert: "354".
	(7b)	Replace "E5" with: "E0".
1251	(6)	Insert: "354".
	(7b)	Replace "E5" with: "E0".
	(10)	Replace "T14" with: "T22".

UN No.	Col-umn	Amendment
	(11)	Add: "TP37".
	(12)	Replace "L10CH" with: "L15CH".
1266, PG II and III	(6)	Insert: "163" (six times).
1267, PG I, II and III	(6)	Insert: "357" (four times).
1353	(6)	Delete: "274".
1373	(6)	Delete: "274".
1389	(6)	Delete: "274".
1390	(6)	Delete: "274".
1391, first entry	(2)	Delete: "having a flash-point above 60 °C".
	(6)	Delete: "274".
1391, sec-ond entry	(1) – (20)	Delete all entries.
1392	(6)	Delete: "274".
1393	(6)	Delete: "274".
1421	(6)	Delete: "274".
1450	(6)	Replace "604" with: "350".
1461	(6)	Replace "605" with: "351".
1462	(6)	Replace "606" with: "352".
1477; PG II and III	(6)	Delete: "274".
1481; PG II and III	(6)	Delete: "274".
1482, PG II and III	(6)	Replace "608" with: "353".
1483; PG II and III	(6)	Delete: "274".
1510	(3a)	Replace "5.1" with: "6.1".
	(3b)	Replace "OT1" with: "TO1".

UN No.	Col-umn	Amendment
	(5)	Replace "5.1+6.1" with: "6.1+5.1".
	(6)	Insert: "354".
	(9b)	Replace "MP2" with: "MP8 MP17".
	(12)	Replace "L4BN" with: "L10CH".
	(13)	Replace "TU3 TU28" with: "TU14 TU15 TU38 TE21 TE22".
	(16)	Delete: "W5".
	(18)	Replace "CW24 CW28" with: "CW13 CW28 CW31".
	(20)	Replace "559" with: "665".
1541	(6)	Insert: "354".
	(7b)	Replace "E5" with: "E0".
	(10)	Replace "T14" with: "T20".
	(11)	Add: "TP37".
1580	(6)	Insert: "354".
	(7b)	Replace "E5" with: "E0".
	(8)	Replace "P602" with: "P601".
	(10)	Replace "T14" with: "T22".
	(11)	Add: "TP37".
	(12)	Replace "L10CH" with: "L15CH".
1595	(6)	Insert: "354".
	(7b)	Replace "E5" with: "E0".
1605	(6)	Insert: "354".
	(7b)	Replace "E5" with: "E0".
	(10)	Replace "T14" with: "T20".
	(11)	Add: "TP37".
1642	(2)	[This amendment in the German text does not concern the English version.]
1647	(6)	Insert: "354".
	(7b)	Replace "E5" with: "E0".

UN No.	Col-umn	Amendment
1649, first entry	(2)	Delete: "having a flash-point above 60 °C".
1649, sec-ond entry	(1) – (20)	Delete all entries.
1670	(6)	Insert: "354".
	(7b)	Replace "E5" with: "E0".
	(10)	Replace "T14" with: "T20".
	(11)	Add: "TP37".
1695	(6)	Insert: "354".
	(7b)	Replace "E5" with: "E0".
	(8)	Replace "P001" with: "P602".
1740; PG II and III	(6)	Delete: "274".
1748, PG II	(6)	Delete: "313" and "589".
1748, PG III	(6)	Delete: "589".
	(9a)	Insert after "B4": "B13".
1752	(6)	Insert: "354".
	(7b)	Replace "E5" with: "E0".
	(8)	Replace "P001" with: "P602".
1809	(6)	Insert: "354".
	(7b)	Replace "E5" with: "E0".
	(8)	Replace "P001" with: "P602".
1810	(3a)	Replace "8" with: "6.1".
	(3b)	Replace "C1" with: "TC3".
	(4)	Replace "II" with: "I".
	(5)	Replace "8" with: "6.1+8".
	(6)	Insert: "354".
	(7a)	Replace "LQ22" with: "0".

UN No.	Col-umn	Amendment
	(7b)	Replace "E2" with: "E0".
	(8)	Replace "P001" with: "P602".
	(9b)	Replace "MP15" with: "MP8 MP17".
	(10)	Replace "T7" with: "T20".
	(11)	Add: "TP37".
	(12)	Replace "L4BN" with: "L10CH".
	(13)	Insert: "TU14 TU15 TU38 TE21 TE22".
	(15)	Replace "2" with: "1".
	(18)	Insert: "CW13 CW28 CW31".
	(19)	Delete: "CE6".
	(20)	Replace "X80" with: "X668".
1834	(3a)	Replace "8" with: "6.1".
	(3b)	Replace "C1" with: "TC3".
	(5)	Replace "8" with: "6.1+8".
	(6)	Insert: "354".
	(11)	Add: "TP37".
	(12)	Replace "L10BH" with: "L10CH".
	(13)	Replace "TU38 TE22" with: "TU14 TU15 TU38 TE21 TE22".
	(18)	Insert: "CW13 CW28 CW31".
	(20)	Replace "X80" with: "668".
1838	(3a)	Replace "8" with: "6.1".
	(3b)	Replace "C1" with: "TC3".
	(4)	Replace "II" with: "I".
	(5)	Replace "8" with: "6.1+8".
	(6)	Insert: "354".
	(7a)	Replace "LQ22" with: "0".
	(7b)	Replace "E2" with: "E0".

UN No.	Col-umn	Amendment
	(8)	Replace "P001 IBC02" with: "P602".
	(9b)	Replace "MP15" with: "MP8 MP17".
	(10)	Replace "T10" with: "T20".
	(11)	Add: "TP37".
	(12)	Replace "L4BN" with: "L10CH".
	(13)	Insert: "TU14 TU15 TU38 TE21 TE22".
	(15)	Replace "2" with: "1".
	(18)	Insert: "CW13 CW28 CW31".
	(19)	Delete: "CE6".
	(20)	Replace "X80" with: "668".
1851, PG II and III	(6)	Delete: "274".
1892	(6)	Insert: "354".
	(7b)	Replace "E5" with: "E0".
	(10)	Replace "T14" with: "T20".
	(11)	Add: "TP37".
1950	(6)	Insert after "327": "344" (twelve times).
1956	(6)	Delete: "292".
1977	(6)	Insert before "593": "345 346".
1994	(6)	Insert: "354".
	(7b)	Replace "E5" with: "E0".
1999	(2)	Amend to read as follows: "TARS, LIQUID, including road oils, and cutback bitumens" (six times). The texts in parenthesis remain unchanged.
2030, first entry	(2)	Delete: ", having a flash-point above 60 °C".
2030, sec-ond entry	(1) – (20)	Delete all entries.
2037	(6)	Insert after "327": "344" (nine times).

UN No.	Col-umn	Amendment
2208	(6)	Delete: "313".
2232	(6)	Insert: "354".
	(7b)	Replace "E5" with: "E0".
	(8)	Replace "P001" with: "P602".
	(10)	Replace "T14" with: "T20".
	(11)	Add: "TP37".
2334	(6)	Insert: "354".
	(7b)	Replace "E5" with: "E0".
2337	(6)	Insert: "354".
	(7b)	Replace "E5" with: "E0".
	(8)	Replace "P001" with: "P602".
2382	(6)	Insert: "354".
	(7b)	Replace "E5" with: "E0".
	(8)	Replace "P001" with: "P602".
	(10)	Replace "T14" with: "T20".
	(11)	Add: "TP37".
2407	(6)	Insert: "354".
	(7b)	Replace "E5" with: "E0".
2430; PG I, II and III	(6)	Delete: "274".
2447	(2)	[This amendment does not concern the English version.]
2474	(4)	Replace "II" with: "I".
	(6)	Add: "354".
	(7a)	Replace "LQ17" with: "0".
	(7b)	Replace "E4" with: "E0".
	(8)	Replace "P001" with: "P602".
	(9b)	Replace "MP15" with: "MP8 MP17".
	(10)	Replace "T7" with: "T20".

UN No.	Col-umn	Amendment
	(11)	Add: "TP37".
	(12)	Replace "L4BH" with: "L10CH".
	(13)	Replace "TU15" with: "TU14 TU15 TU38 TE21 TE22".
	(15)	Replace "2" with: "1".
	(19)	Delete: "CE5".
	(20)	Replace "60" with: "66".
2477	(6)	Insert: "354".
	(7b)	Replace "E5" with: "E0".
	(8)	Replace "P001" with: "P602".
	(10)	Replace "T14" with: "T20".
	(11)	Add: "TP37".
2480	(6)	Insert: "354".
	(7b)	Replace "E5" with: "E0".
2481	(3a)	Replace "3" with: "6.1".
	(3b)	Replace "FT1" with: "TF1".
	(5)	Replace "3+6.1" with: "6.1+3".
	(6)	Insert: "354".
	(8)	Replace "P601" with: "P602".
	(9b)	Replace "MP2" with: "MP8 MP17".
	(10)	Replace "T14" with: "T20".
	(11)	Add: "TP37".
	(18)	Insert: "CW31".
	(20)	Replace "336" with: "663".
2482	(6)	Insert: "354".
	(7b)	Replace "E5" with: "E0".
	(8)	Replace "P001" with: "P602".
	(10)	Replace "T14" with: "T20".

UN No.	Col-umn	Amendment
	(11)	Add: "TP37".
2483	(3a)	Replace "3" with: "6.1".
	(3b)	Replace "FT1" with: "TF1".
	(5)	Replace "3+6.1" with: "6.1+3".
	(6)	Insert: "354".
	(8)	Replace "P001" with: "P602".
	(9b)	Replace "MP7 MP17" with: "MP8 MP17".
	(10)	Replace "T14" with: "T20".
	(11)	Add: "TP37".
	(18)	Insert: "CW31".
	(20)	Replace "336" with: "663".
2484	(6)	Insert: "354".
	(7b)	Replace "E5" with: "E0".
	(8)	Replace "P001" with: "P602".
	(10)	Replace "T14" with: "T20".
	(11)	Add: "TP37".
2485	(6)	Insert: "354".
	(7b)	Replace "E5" with: "E0".
	(8)	Replace "P001" with: "P602".
	(10)	Replace "T14" with: "T20".
	(11)	Add: "TP37".
2486	(3a)	Replace "3" with: "6.1".
	(3b)	Replace "FT1" with: "TF1".
	(4)	Replace "II" with: "I".
	(5)	Replace "3+6.1" with: "6.1+3".
	(6)	Insert: "354".
	(7b)	Replace "E2" with: "E0".

UN No.	Col-umn	Amendment
	(8)	Replace "P001" with: "P602".
	(9b)	Replace "MP19" with: "MP8 MP17".
	(10)	Replace "T8" with: "T20".
	(11)	Add: "TP37".
	(12)	Replace "L4BH" with: "L10CH".
	(13)	Replace "TU15" with: "TU14 TU15 TU38 TE21 TE22".
	(15)	Replace "2" with: "1".
	(18)	Insert: "CW31".
	(19)	Delete: "CE7".
	(20)	Replace "336" with: "663".
2487	(6)	Insert: "354".
	(7b)	Replace "E5" with: "E0".
	(8)	Replace "P001" with: "P602".
	(10)	Replace "T14" with: "T20".
	(11)	Add: "TP37".
2488	(6)	Insert: "354".
	(7b)	Replace "E5" with: "E0".
	(8)	Replace "P001" with: "P602".
	(10)	Replace "T14" with: "T20".
	(11)	Add: "TP37".
2521	(6)	Insert: "354".
	(7b)	Replace "E5" with: "E0".
	(8)	Replace "P001" with: "P602".
	(10)	Replace "T14" with: "T20".
	(11)	Add: "TP37".
2583	(6)	Delete: "274".
2584	(6)	Delete: "274".

UN No.	Col-umn	Amendment
2585	(6)	Delete: "274".
2586	(6)	Delete: "274".
2605	(3a)	Replace "3" with: "6.1".
	(3b)	Replace "FT1" with: "TF1".
	(5)	Replace "3+6.1" with: "6.1+3".
	(6)	Insert: "354".
	(8)	Replace "P001" with: "P602".
	(9b)	Replace "MP7 MP17" with: "MP8 MP17".
	(10)	Replace "T14" with: "T20".
	(11)	Add: "TP37".
	(18)	Insert: "CW31".
	(20)	Replace "336" with: "663".
2606	(6)	Insert: "354".
	(7b)	Replace "E5" with: "E0".
	(8)	Replace "P001" with: "P602".
	(10)	Replace "T14" with: "T20".
	(11)	Add: "TP37".
2644	(6)	Insert: "354".
	(7b)	Replace "E5" with: "E0".
	(8)	Replace "P001" with: "P602".
	(10)	Replace "T14" with: "T20".
	(11)	Add: "TP37".
2646	(6)	Insert: "354".
	(7b)	Replace "E5" with: "E0".
	(8)	Replace "P001" with: "P602".
2668	(4)	Replace "II" with: "I".
	(6)	Insert: "354".

UN No.	Col-umn	Amendment
	(7a)	Replace "LQ17" with: "0".
	(7b)	Replace "E4" with: "E0".
	(8)	Replace "P001 IBC02" with: "P602".
	(9b)	Replace "MP15" with: "MP8 MP17".
	(10)	Replace "T7" with: "T20".
	(11)	Add: "TP37".
	(12)	Replace "L4BH" with: "L10CH".
	(13)	Replace "TU15" with: "TU14 TU15 TU38 TE21 TE22".
	(15)	Replace "2" with: "1".
	(18)	Insert: "CW31".
	(19)	Delete: "CE5".
	(20)	Replace "63" with: "663".
2837, PG II and III	(6)	Delete: "274".
2880, PG II and III	(6)	Delete: "313".
2880, PG III	(9a)	Insert after "B4": "B13".
2910	(6)	Add: "325".
2916	(6)	Insert: "325".
2917	(6)	Insert: "325".
2919	(6)	Add: "325".
2985	(6)	Delete: "274".
2986	(6)	Delete: "274".
2987	(6)	Delete: "274".
2988	(6)	Delete: "274".
3023	(6)	Insert: "354".
	(7b)	Replace "E5" with: "E0".
	(8)	Replace "P001" with: "P602".

UN No.	Col-umn	Amendment
3079	(3a)	Replace "3" with: "6.1".
	(3b)	Replace "FT1" with: "TF1".
	(5)	Replace "3+6.1" with: "6.1+3".
	(6)	Insert: "354".
	(8)	Replace "P001" with: "P602".
	(9b)	Replace "MP7 MP17" with: "MP8 MP17".
	(10)	Replace "T14" with: "T20".
	(11)	Add: "TP37".
	(18)	Insert: "CW31".
	(20)	Replace "336" with: "663".
3089, PG II and III	(6)	Delete: "274".
3145, PG I, II and III	(6)	Delete: "274".
3166	(2)	At the end, add: "or engine, fuel cell, flammable gas powered or engine, fuel cell, flammable liquid powered or vehicle, fuel cell, flammable gas powered or vehicle, fuel cell, flammable liquid powered".
3167	(6)	Delete: "274".
3168	(6)	Delete: "274".
3169	(6)	Delete: "274".
3210, PG II and III	(6)	Replace "605" with: "351".
3211, PG II and III	(6)	Delete: "274".
3212	(6)	Replace "559" with: "349".
3213, PG II and III	(6)	Replace "604" with: "350".
3214	(6)	Replace "608" with: "353".
3215	(6)	Delete: "274".
3216	(6)	Delete: "274".

UN No.	Col-umn	Amendment
3218, PG II and III	(6)	Delete: "274".
3246	(6)	Insert: "354".
	(7b)	Replace "E5" with: "E0".
	(8)	Replace "P001" with: "P602".
	(10)	Replace "T14" with: "T20".
	(11)	Add: "TP37".
3248, PG II and III	(6)	Delete: "274".
3249, PG II and III	(6)	Delete: "274".
3323	(6)	Add: "325".
3328	(6)	Insert: "326".
3329	(6)	Insert: "326".
3330	(6)	Add: "326".
3331	(6)	Add: "326".
3359	(2)	Amend to read as follows: "FUMIGATED CARGO TRANSPORT UNIT".
3381	(7b)	Replace "E5" with: "E0".
	(12)	Replace "L10CH" with: "L15CH".
3382	(7b)	Replace "E5" with: "E0".
3383	(7b)	Replace "E5" with: "E0".
	(12)	Replace "L10CH" with: "L15CH".
3384	(7b)	Replace "E5" with: "E0".
3385	(7b)	Replace "E5" with: "E0".
	(12)	Replace "L10CH" with: "L15CH".
3386	(7b)	Replace "E5" with: "E0".
3387	(7b)	Replace "E5" with: "E0".
	(12)	Replace "L10CH" with: "L15CH".

UN No.	Col-umn	Amendment
3388	(7b)	Replace "E5" with: "E0".
3389	(12)	Replace "L10CH" with: "L15CH".
3390	(7b)	Replace "E5" with: "E0".
3391	(11)	Add: "TP36".
3392	(11)	Add: "TP36".
3393	(11)	Add: "TP36".
3394	(11)	Add: "TP36".
3395, PG I, II and III	(11)	Add: "TP36".
3396, PG I, II and III	(11)	Add: "TP36".
3397, PG I, II and III	(11)	Add: "TP36".
3398, PG I, II and III	(11)	Add: "TP36".
3399, PG I, II and III	(11)	Add: "TP36".
3400, PG II and III	(11)	Add: "TP36".
3401	(6)	Delete: "274".
3402	(6)	Delete: "274".
3468	(6)	Add: "356".
	(8)	Replace "P099" with: "P205".
3474	(2)	Amend to read as follows: "1-HYDROXYBENZOTRIAZOLE MONOHYDRATE".
3480	(6)	Insert after "310": "348".
3481	(6)	Insert after "310": "348".

Add the following new entries:

UN No.	Name and description	Class	Classification code	Packing group	Labels	Special provisions	Limited and excepted quantities		Packaging			Portable tanks and bulk containers		RID-Tanks		Transport category	Special provisions for carriage			Colis express	Hazard identification No.
									Packing instructions	Special packing provisions	Mixed packing provisions	Instructions	Special provisions	Tank code	Special provisions		Packages	Bulk	Loading, unloading and handling		
(1)	(2)	(3a)	(3b)	(4)	(5)	(6)	(7a)	(7b)	(8)	(9a)	(9b)	(10)	(11)	(12)	(13)	(15)	(16)	(17)	(18)	(19)	(20)
0509	POWDER, SMOKELESS	1	1.4C		1.4		0	E0	P114b	PP48	MP20					2	W2		CW1		1.4C
1471	LITHIUM HYPOCHLORITE, DRY or LITHIUM HYPOCHLORITE MIXTURE	5.1	O2	III	5.1		5 kg	E1	P002 IBC08 LP02 R001	B3	MP10	T1	TP33	SGAV	TU3	3			CW24	CE11	50
3482	ALKALI METAL DISPERSION, FLAMMABLE or ALKALINE EARTH METAL DISPERSION, FLAMMABLE	4.3	WF1	I	4.3+3	182 183 506	0	E0	P402	RR8	MP2			L10BN(+)	TU1 TE5 TT3 TM2	1	W1		CW23		X323
3483	MOTOR FUEL ANTI-KNOCK MIXTURE, FLAMMABLE	6.1	TF1	I	6.1+3		0	E5	P602		MP8 MP17	T14	TP2	L10CH	TU14 TU15 TU38 TE21 TE22 TT6	1			CW13 CW28 CW31		663
3484	HYDRAZINE AQUEOUS SOLUTION, FLAMMABLE with more than 37% hydrazine, by mass	8	CFT	I	8+3 +6.1	530	0	E0	P001		MP8 MP17	T10	TP2	L10BH	TU38 TE22	1			CW13 CW28		886
3485	CALCIUM HYPOCHLORITE, DRY, CORROSIVE or CALCIUM HYPOCHLORITE MIXTURE, DRY, CORROSIVE with more than 39% available chlorine (8.8% available oxygen)	5.1	OC2	II	5.1+8	314	LQ11	E2	P002 IBC08	B4 B13	MP2			SGAN	TU3	2	W11		CW24 CW35	CE10	58
3486	CALCIUM HYPOCHLORITE MIXTURE, DRY, CORROSIVE with more than 10% but not more than 39% available chlorine	5.1	OC2	III	5.1+8	314	5 kg	E1	P002 IBC08 LP02 R001	B3 B13	MP2			SGAN	TU3	3			CW24 CW35	CE11	58

UN No.	Name and description	Class	Classification code	Packing group	Labels	Special provisions	Limited and excepted quantities		Packaging			Portable tanks and bulk containers		RID-Tanks		Transport category	Special provisions for carriage			Colis express	Hazard identification No.
									Packing instructions	Special packing provisions	Mixed packing provisions	Instructions	Special provisions	Tank code	Special provisions		Packages	Bulk	Loading, unloading and handling		
(1)	(2)	(3a)	(3b)	(4)	(5)	(6)	(7a)	(7b)	(8)	(9a)	(9b)	(10)	(11)	(12)	(13)	(15)	(16)	(17)	(18)	(19)	(20)
3487	CALCIUM HYPOCHLORITE, HYDRATED, CORROSIVE or CALCIUM HYPOCHLORITE, HYDRATED MIXTURE, CORROSIVE with not less than 5.5% but not more than 16% water	5.1	OC2	II	5.1+8	314 322	1 kg	E2	P002 IBC08	B4 B13	MP2			SGAN	TU3	2	W11		CW24 CW35	CE10	58
3487	CALCIUM HYPOCHLORITE, HYDRATED, CORROSIVE or CALCIUM HYPOCHLORITE, HYDRATED MIXTURE, CORROSIVE with not less than 5.5% but not more than 16% water	5.1	OC2	III	5.1+8	314	5 kg	E1	P002 IBC08 R001	B4 B13	MP2			SGAN	TU3	3			CW24 CW35	CE11	58
3488	TOXIC BY INHALATION LIQUID, FLAMMABLE, CORROSIVE, N.O.S. with an inhalation toxicity lower than or equal to 200 ml/m³ and saturated vapour concentration greater than or equal to 500 LC_{50}	6.1	TFC	I	6.1+3 +8	274	0	E0	P601		MP8 MP17	T22	TP2	L15CH	TU14 TU15 TU38 TE21 TE22	1			CW13 CW28 CW31		663
3489	TOXIC BY INHALATION LIQUID, FLAMMABLE, CORROSIVE, N.O.S. with an inhalation toxicity lower than or equal to 1000 ml/m³ and saturated vapour concentration greater than or equal to 10 LC_{50}	6.1	TFC	I	6.1+3 +8	274	0	E0	P602		MP8 MP17	T20	TP2	L10CH	TU14 TU15 TU38 TE21 TE22	1			CW13 CW28 CW31		663
3490	TOXIC BY INHALATION LIQUID, WATER-REACTIVE, FLAMMABLE, N.O.S. with an inhalation toxicity lower than or equal to 200 ml/m³ and saturated vapour concentration greater than or equal to 500 LC_{50}	6.1	TFW	I	6.1+ 4.3+3	274	0	E0	P601		MP8 MP17	T22	TP2	L15CH	TU14 TU15 TU38 TE21 TE22	1			CW13 CW28 CW31		623

UN No.	Name and description	Class	Classification code	Packing group	Labels	Special provisions	Limited and excepted quantities		Packaging			Portable tanks and bulk containers		RID-Tanks		Transport category	Special provisions for carriage			Colis express	Hazard identification No.
									Packing instructions	Special packing provisions	Mixed packing provisions	Instructions	Special provisions	Tank code	Special provisions		Packages	Bulk	Loading, unloading and handling		
(1)	(2)	(3a)	(3b)	(4)	(5)	(6)	(7a)	(7b)	(8)	(9a)	(9b)	(10)	(11)	(12)	(13)	(15)	(16)	(17)	(18)	(19)	(20)
3491	TOXIC BY INHALATION LIQUID, WATER-REACTIVE, FLAMMABLE, N.O.S. with an inhalation toxicity lower than or equal to 1000 ml/m³ and saturated vapour concentration greater than or equal to 10 LC_{50}	6.1	TFW	I	6.1+4.3+3	274	0	E0	P602		MP8 MP17	T20	TP2	L10CH	TU14 TU15 TU38 TE21 TE22	1			CW13 CW28 CW31		623
3492	TOXIC BY INHALATION LIQUID, CORROSIVE, FLAMMABLE, N.O.S. with an inhalation toxicity lower than or equal to 200 ml/m³ and saturated vapour concentration greater than or equal to 500 LC_{50}	6.1	TFC	I	6.1+8+3	274	0	E0	P601		MP8 MP17	T22	TP2	L15CH	TU14 TU15 TU38 TE21 TE22	1			CW13 CW28 CW31		668
3493	TOXIC BY INHALATION LIQUID, CORROSIVE, FLAMMABLE, N.O.S. with an inhalation toxicity lower than or equal to 1000 ml/m³ and saturated vapour concentration greater than or equal to 10 LC_{50}	6.1	TFC	I	6.1+8+3	274	0	E0	P602		MP8 MP17	T20	TP2	L10CH	TU14 TU15 TU38 TE21 TE22	1			CW13 CW28 CW31		668
3494	PETROLEUM SOUR CRUDE OIL, FLAMMABLE, TOXIC	3	FT1	I	3+6.1	343 649	0	E0	P001		MP7 MP17	T14	TP2	L10CH	TU14 TU15 TU38 TE21 TE22	1			CW13 CW28		336
3494	PETROLEUM SOUR CRUDE OIL, FLAMMABLE, TOXIC	3	FT1	II	3+6.1	343 649	1 l	E2	P001 IBC02		MP19	T7	TP2	L4BH	TU15	2			CW13 CW28	CE7	336
3494	PETROLEUM SOUR CRUDE OIL, FLAMMABLE, TOXIC	3	FT1	III	3+6.1	343 649	5 l	E1	P001 IBC03 R001		MP19	T4	TP1	L4BH	TU15	3			CW13 CW28	CE4	36
3495	IODINE	8	CT2	III	8+6.1	279	5 kg	E1	P002 IBC08 R001	B3	MP10	T1	TP33	SGAV L4BN		3		VW9	CW13 CW28	CE11	86
3496	Batteries, nickel-metal hydride	9	M11	NOT SUBJECT TO RID																	

Table B

Insert the following new entries:

Name and description	UN No.	Note	NHM Code
ALKALI METAL DISPERSION, FLAMMABLE	3482		280519
ALKALINE EARTH METAL DISPERSION, FLAMMABLE	3482		280519
Batteries, nickel-metal hydride	3496	Exempt	850680
CALCIUM HYPOCHLORITE, DRY, CORROSIVE	3485		282810
CALCIUM HYPOCHLORITE, HYDRATED, CORROSIVE with not less than 5.5% but not more than 16% water	3487		282810
CALCIUM HYPOCHLORITE, HYDRATED MIXTURE, CORROSIVE with not less than 5.5% but not more than 16% water	3487		282810
CALCIUM HYPOCHLORITE MIXTURE, DRY, CORROSIVE with more than 10% but not more than 39% available chlorine	3486		282810
CALCIUM HYPOCHLORITE MIXTURE, DRY, CORROSIVE with more than 39% available chlorine (8.8% available oxygen)	3485		282810
HYDRAZINE AQUEOUS SOLUTION, FLAMMABLE with more than 37% hydrazine, by mass	3484		282510
IODINE	3495		280120
LITHIUM HYPOCHLORITE, DRY	1471		282890
LITHIUM HYPOCHLORITE MIXTURE	1471		282890
MOTOR FUEL ANTI-KNOCK MIXTURE, FLAMMABLE	3483		381111
PETROLEUM SOUR CRUDE OIL, FLAMMABLE, TOXIC	3494		270900
POWDER, SMOKELESS	0509		360200
Rubidium nitrate: see	1477		283429
TOXIC BY INHALATION LIQUID, CORROSIVE, FLAMMABLE, N.O.S. with an inhalation toxicity lower than or equal to 200 ml/m³ and saturated vapour concentration greater than or equal to 500 LC_{50}	3492		+++++ +
TOXIC BY INHALATION LIQUID, CORROSIVE, FLAMMABLE, N.O.S. with an inhalation toxicity lower than or equal to 1000 ml/m³ and saturated vapour concentration greater than or equal to 10 LC_{50}	3493		+++++ +
TOXIC BY INHALATION LIQUID, FLAMMABLE, CORROSIVE, N.O.S. with an inhalation toxicity lower than or equal to 200 ml/m³ and saturated vapour concentration greater than or equal to 500 LC_{50}	3488		+++++ +
TOXIC BY INHALATION LIQUID, FLAMMABLE, CORROSIVE, N.O.S. with an inhalation toxicity lower than or equal to 1000 ml/m³ and saturated vapour concentration greater than or equal to 10 LC_{50}	3489		+++++ +
TOXIC BY INHALATION LIQUID, WATER-REACTIVE, FLAMMABLE, N.O.S. with an inhalation toxicity lower than or equal to 200 ml/m³ and saturated vapour concentration greater than or equal to 500 LC_{50}	3490		+++++ +

Name and description	UN No.	Note	NHM Code
TOXIC BY INHALATION LIQUID, WATER-REACTIVE, FLAMMABLE, N.O.S. with an inhalation toxicity lower than or equal to 1000 ml/m³ and saturated vapour concentration greater than or equal to 10 LC_{50}	3491		+++++ +

Amend the following entries:

Name and description	UN No.	Amendment
Asphalt at or above 100 °C and below its flash-point: see	3257	Delete.
Asphalt with a flash-point above 60 °C, at or above its flash-point: see	3256	Delete.
Asphalt with a flash-point not greater than 60 °C: see	1999	Delete.
Bitumen at or above 100 °C and below its flash-point: see	3257	Delete.
Bitumen with a flash-point above 60 °C, at or above its flash-point: see	3256	Delete.
Bitumen with a flash-point not greater than 60 °C: see	1999	Delete.
Cut backs at or above 100 °C and below its flash-point: see	3257	In the name, replace "Cut backs" with: "Cutback bitumens".
Cut backs with a flash-point above 60 °C, at or above its flash-point: see	3256	In the name, replace "Cut backs" with: "Cutback bitumens".
Cut backs with a flash-point not greater than 60 °C: see	1999	In the name, replace "Cut backs" with: "Cutback bitumens".
Engine, internal combustion or vehicle, flammable gas powered or vehicle, flammable liquid powered	3166	At the end of the name, add: "or engine, fuel cell, flammable gas powered or engine, fuel cell, flammable liquid powered or vehicle, fuel cell, flammable gas powered or vehicle, fuel cell, flammable liquid powered".
FUMIGATED UNIT	3359	Amend the name to read as follows: "FUMIGATED CARGO TRANSPORT UNIT".
1-HYDROXYBENZOTRIAZOLE, ANHYDROUS, WETTED with not less than 20% water, by mass	3474	Amend the name to read as follows: "1-HYDROXYBENZOTRIAZOLE MONOHYDRATE".
MERCURY OXYCYANIDE, DESENSITIZED	1642	[This amendment to the German text does not concern the English version.]
PHOSPHORUS, YELLOW, MOLTEN	2447	[This amendment to the French and German text does not concern the English version.]
Tar oils at or above 100 °C and below its flash-point: see	3257	In the name, replace "Tar oils" with: "Road oils".

Name and description	UN No.	Amendment
Tar oils with a flash-point above 60 °C, at or above its flash-point: see	3256	In the name, replace "Tar oils" with: "Road oils".
Tar oils with a flash-point not greater than 60 °C: see	1999	In the name, replace "Tar oils" with: "Road oils".
Tars, liquid, including road asphalt and oils, bitumen and cut backs, at or above 100 °C and below its flash-point: see	3257	Amend the name to read as follows: "Tars, liquid, including road oils, and cutback bitumens, at or above 100 °C and below its flash-point: see".
Tars, liquid, including road asphalt and oils, bitumen and cut backs, with a flash-point above 60 °C, at or above its flash-point: see	3256	Amend the name to read as follows: "Tars, liquid, including road oils, and cutback bitumens, with a flash-point above 60 °C, at or above its flash-point: see"
TARS, LIQUID, including road asphalt and oils, bitumen and cut backs, with a flash-point not greater than 60 °C	1999	Amend the name to read as follows: "TARS, LIQUID, including road oils, and cutback bitumens".

Chapter 3.3

SP 172 At the end, add the following new sentence:

"For packing, see also 4.1.9.1.5."

SP 188 In (b), at the end of the second sentence, delete:

", except those manufactured before 1 January 2009 which may be carried in accordance with this special provision and without this marking until 31 December 2010".

In (f), at the beginning, insert after "Except for packages containing":

"button cell batteries installed in equipment (including circuit boards), or".

SP 198 Insert after "paints":

", perfumery products".

Insert after "1263":

", 1266".

SP 219 Amend to read as follows:

"**219** Genetically modified microorganisms (GMMOs) and genetically modified organisms (GMOs) packed and marked in accordance with packing instruction P 904 of 4.1.4.1 are not subject to any other requirements of RID.

If GMMOs or GMOs meet the criteria for inclusion in Class 6.1 or 6.2 (see 2.2.61.1 and 2.2.62.1) the requirements in RID for the carriage of toxic substances or infectious substances apply."

SP 290 Amend to read as follows:

"**290** When this radioactive material meets the definitions and criteria of other classes as defined in Part 2, it shall be classified in accordance with the following:

(a) Where the substance meets the criteria for dangerous goods in excepted quantities as set out in Chapter 3.5, the packagings shall be in accordance with 3.5.2 and meet the testing requirements of 3.5.3. All other requirements applicable to radioactive material, excepted packages as set out in 1.7.1.5 shall apply without reference to the other class;

(b) Where the quantity exceeds the limits specified in 3.5.1.2 the substance shall be classified in accordance with the predominant subsidiary risk. The transport document shall describe the substance with the UN number and proper shipping name applicable to the other class supplemented with the name applicable to the radioactive excepted package according to Column (2) of Table A of Chapter 3.2, and shall be carried in accordance with the provisions applicable to that UN number. An example of the information shown on the transport document is:

"UN 1993 FLAMMABLE LIQUID, N.O.S. (ethanol and toluene mixture), Radioactive material, excepted package – limited quantity of material, 3, PG II".

In addition, the requirements of 2.2.7.2.4.1 shall apply.

(c) The provisions of Chapter 3.4 for the carriage of dangerous goods packed in limited quantities shall not apply to substances classified in accordance with sub-paragraph (b);

(d) When the substance meets a special provision that exempts this substance from all dangerous goods provisions of the other classes it shall be classified in accordance with the applicable UN number of Class 7 and all requirements specified in 1.7.1.5 shall apply."

SP 292 Amend to read as follows:

"**292** (Deleted)."

SP 302 Amend to read as follows:

"**302** Fumigated cargo transport units containing no other dangerous goods are only subject to the provisions of 5.5.2."

SP 304 Amend to read as follows:

"**304** This entry may only be used for the transport of non-activated batteries which contain dry potassium hydroxide and which are intended to be activated prior to use by addition of an appropriate amount of water to the individual cells."

SP 313 Amend to read as follows:

"**313** (Deleted)."

SP 503 Delete:

"or yellow".

SP 559 Amend to read as follows:

"**559** (Deleted)".

SP 589 Amend to read as follows:

"**589** (Deleted)".

SP 593 Replace "P 203 (12)" with:

"P 203, paragraph (6) for open cryogenic receptacles".

SP 604 Amend to read as follows:

"**604** (Deleted)".

SP 605 Amend to read as follows:

"**605** (Deleted)".

SP 606 Amend to read as follows:

"**606** (Deleted)".

SP 608 Amend to read as follows:

"**608** (Deleted)".

635 [This amendment in the German version does not apply to the English text.]

SP 645 Insert a new second sentence to read as follows:

"The approval shall be given in writing as a classification approval certificate (see 5.4.1.2.1 (g)) and shall be provided with a unique reference."

SP 649 Replace "ASTM D86-01" with:

"ASTM D86-07a or ISO 3405".

In footnote 2 (new footnote 3), replace "September 2001" with:

"April 2007".

[or

DS 649 Amend to read as follows:

"**649** (Deleted)".**]**

SP 653 Amend the beginning to read as follows:

"The carriage of this gas in cylinders having a test pressure capacity product of maximum 15 MPa·litre (150 bar·litre) is not subject …".

In the fifth indent, replace "marked with "UN 1013"" with:

"marked with "UN 1013" for carbon dioxide or "UN 1066" for nitrogen, compressed".

Add the following new special provisions:

"**342** Glass inner receptacles (such as ampoules or capsules) intended only for use in sterilization devices, when containing less than 30 ml of ethylene oxide per inner packaging with not more than 300 ml per outer packaging, may be carried in accordance with the provisions in Chapter 3.5, irrespective of the indication of "E0" in column (7b) of Table A of Chapter 3.2 provided that:

(a) After filling, each glass inner receptacle has been determined to be leak-tight by placing the glass inner receptacle in a hot water bath at a temperature, and for a period of time, sufficient to ensure that an internal pressure equal to the vapour pressure of ethylene oxide at 55 °C is achieved. Any glass inner receptacle showing evidence of leakage, distortion or other defect under this test shall not be carried under the terms of this special provision;

(b) In addition to the packaging required by 3.5.2, each glass inner receptacle is placed in a sealed plastics bag compatible with ethylene oxide and capable of containing the contents in the event of breakage or leakage of the glass inner receptacle; and

(c) Each glass inner receptacle is protected by a means of preventing puncture of the plastics bag (e.g. sleeves or cushioning) in the event of damage to the packaging (e.g. by crushing).

343 This entry applies to crude oil containing hydrogen sulphide in sufficient concentration that vapours evolved from the crude oil can present an inhalation hazard. The packing group assigned shall be determined by the flammability hazard and inhalation hazard, in accordance with the degree of danger presented.

344 The provisions of 6.2.6 shall be met.

345 This gas contained in open cryogenic receptacles with a maximum capacity of 1 litre constructed with glass double walls having the space between the inner and outer wall evacuated (vacuum insulated) is not subject to RID provided each receptacle is carried in an outer packaging with suitable cushioning or absorbent materials to protect it from impact damage.

346 Open cryogenic receptacles conforming to the requirements of packing instruction P 203 of 4.1.4.1 and containing no dangerous goods except for UN No. 1977 nitrogen, refrigerated liquid, which is fully absorbed in a porous material are not subject to any other requirements of RID.

347 This entry shall only be used if the results of Test series 6 (d) of Part I of the Manual of Tests and Criteria have demonstrated that any hazardous effects arising from functioning are confined within the package.

348 Batteries manufactured after 31 December 2011 shall be marked with the Watt-hour rating on the outside case.

349 Mixtures of a hypochlorite with an ammonium salt are not to be accepted for carriage. UN No. 1791 hypochlorite solution is a substance of Class 8.

350 Ammonium bromate and its aqueous solutions and mixtures of a bromate with an ammonium salt are not to be accepted for carriage.

351 Ammonium chlorate and its aqueous solutions and mixtures of a chlorate with an ammonium salt are not to be accepted for carriage.

352 Ammonium chlorite and its aqueous solutions and mixtures of a chlorite with an ammonium salt are not to be accepted for carriage.

353 Ammonium permanganate and its aqueous solutions and mixtures of a permanganate with an ammonium salt are not to be accepted for carriage.

354 This substance is toxic by inhalation.

355 Oxygen cylinders for emergency use carried under this entry may include installed actuating cartridges (cartridges, power device of Division 1.4, Compatibility Group C or S), without changing the classification in Class 2 provided the total quantity of deflagrating (propellant) explosives does not exceed 3.2 g per oxygen cylinder. The cylinders with the installed actuating cartridges as prepared for carriage shall have an effective means of preventing inadvertent activation.

356 Metal hydride storage system(s) installed in conveyances or in completed conveyance components or intended to be installed in conveyances shall be approved by the competent authority of the country of manufacture[1] before acceptance for carriage. The transport document shall include an indication that the package was approved by the competent authority of the country of manufacture[1] or a copy of the competent authority of the country of manufacture[1] approval shall accompany each consignment.

[1] If the country of manufacture is not a [RID Contracting State], the approval shall be recognized by the competent authority of a [RID Contracting State].

Footnotes 1 and 2 become 2 and 3.

357 Petroleum crude oil containing hydrogen sulphide in sufficient concentration that vapours evolved from the crude oil can present an inhalation hazard shall be consigned under the entry UN 3494 PETROLEUM SOUR CRUDE OIL, FLAMMABLE, TOXIC.

655 Cylinders and their closures designed, constructed, approved and marked in accordance with Directive 97/23/EC[4] and used for breathing apparatus may be carried without conforming to Chapter 6.2, provided that they are subject to inspections and tests specified in 6.2.1.6.1 and the interval between tests specified in packing instruction P200 in 4.1.4.1 is not exceeded. The pressure used for the hydraulic pressure test is the pressure marked on the cylinder in accordance with Directive 97/23/EC.

[4] Directive 97/23/EC of the European Parliament and of the Council of 29 May 1997 on the approximation of the laws of the Member States concerning pressure equipment (PED) (Official Journal of the European Communities No. L 181 of 9 July 1997, p. 1 - 55).

656 The requirement of the first sentence of special provision 188 (e) does not apply to devices which are intentionally active in transport (radio frequency identification (RFID) transmitters, watches, sensors, etc.) and which are not capable of generating a dangerous evolution of heat.

Notwithstanding special provision 188 (b), batteries manufactured before 1 January 2009 may continue to be carried without the Watt-hour rating on the outside case after 31 December 2010."

Chapter 3.4

Amend to read as follows:

"**Chapter 3.4**

Dangerous goods packed in limited quantities

3.4.1 This Chapter provides the provisions applicable to the transport of dangerous goods of certain classes packed in limited quantities. The applicable quantity limit for the inner packaging or article is specified for each substance in Column (7a) of Table A of Chapter 3.2. In addition, the quantity "0" has been indicated in this column for each entry not permitted to be transported in accordance with this Chapter.

Limited quantities of dangerous goods packed in such limited quantities, meeting the provisions of this Chapter are not subject to any other provisions of RID except the relevant provisions of:

(a) Part 1, Chapters 1.1, 1.2, 1.3, 1.4, 1.5, 1.6, 1.8, 1.9;

(b) Part 2;

(c) Part 3, Chapters 3.1, 3.2, 3.3 (except special provisions 61, 178, 181, 220, 274, 313, 625. 633 and 650 (e));

(d) Part 4, paragraphs 4.1.1.1, 4.1.1.2, 4.1.1.4 to 4.1.1.8;

(e) Part 5, 5.1.2.1(a) (i) and (b), 5.1.2.2, 5.1.2.3, 5.2.1.9, 5.4.2;

(f) Part 6, construction requirements of 6.1.4 and paragraphs 6.2.5.1 and 6.2.6.1 to 6.2.6.3;

(g) Part 7, Chapter 7.1 and 7.2.1, 7.2.2, 7.5.1 (except 7.5.1.4), 7.5.7, 7.5.8 and 7.5.9.

3.4.2 Dangerous goods shall be packed only in inner packagings placed in suitable outer packagings. Intermediate packagings may be used. However, the use of inner packagings is not necessary for the transport of articles such as aerosols or "receptacles, small, containing gas". The total gross mass of the package shall not exceed 30 kg.

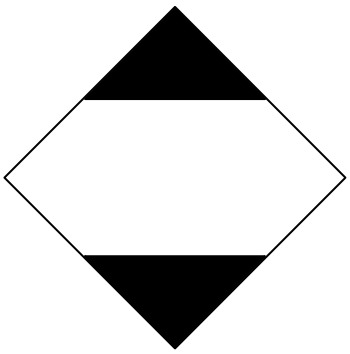
3.4.3 Shrink-wrapped or stretch-wrapped trays meeting the conditions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8 are acceptable as outer packagings for articles or inner packagings containing dangerous goods carried in accordance with this Chapter. Inner packagings that are liable to break or be easily punctured, such as those made of glass, porcelain, stoneware or certain plastics, shall be placed in suitable intermediate packagings meeting the provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8, and be so designed that they meet the construction requirements of 6.1.4. The total gross mass of the package shall not exceed 20 kg.

3.4.4 Liquid goods of Class 8, packing group II in glass, porcelain or stoneware inner packagings shall be enclosed in a compatible and rigid intermediate packaging.

3.4.5 (Reserved)

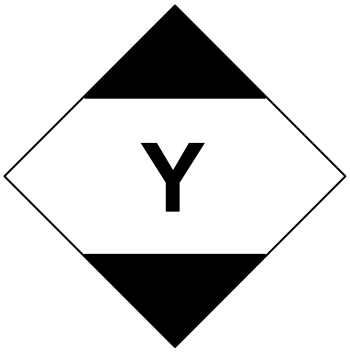
3.4.6 (Reserved)

3.4.7 Except for air transport, packages containing dangerous goods in limited quantities shall bear the marking shown below.



The marking shall be readily visible, legible and able to withstand open weather exposure without a substantial reduction in effectiveness. The top and bottom portions and the surrounding line shall be black. The centre area shall be white or a suitable contrasting background. The minimum dimensions shall be 100 mm × 100 mm and the minimum width of line forming the diamond shall be 2 mm. If the size of the package so requires, the dimension may be reduced, to be not less than 50 mm × 50 mm provided the marking remains clearly visible.

3.4.8 Packages containing dangerous goods consigned for air transport in conformity with the provisions of Part 3, Chapter 4 of the ICAO Technical Instructions for the Safe Transport of Dangerous Goods by Air shall bear the marking shown below.



The marking shall be readily visible, legible and able to withstand open weather exposure without a substantial reduction in effectiveness. The top and bottom portions and the surrounding line shall be black. The centre area shall be white or a suitable contrasting background. The minimum dimensions shall be 100 mm × 100 mm. The minimum width of line forming diamond shall be 2 mm. The symbol "Y" shall be placed in the centre of the mark and shall be clearly visible. If the size of the package so requires, the dimension may be reduced, to be not less than 50 mm × 50 mm provided the marking remains clearly visible.

3.4.9 Packages containing dangerous goods bearing the marking shown in 3.4.8 shall be deemed to meet the provisions of sections 3.4.1 to 3.4.4 of this Chapter and need not bear the marking shown in 3.4.7.

3.4.10 (Reserved)

3.4.11 When packages containing dangerous goods packed in limited quantities are placed in an overpack, the provisions of 5.1.2 shall apply. In addition the overpack shall be marked with the markings required by this chapter unless the markings representative of all dangerous goods in the overpack are visible. The provisions of 5.1.2.1 (a) (ii) and 5.2.1.4 apply only if other dangerous goods which are not packed in limited quantities are contained, and only in relation to these other dangerous goods.

3.4.12 In advance of carriage, consignors of dangerous goods packed in limited quantities shall inform the carrier in a traceable form of the total gross mass of such goods to be consigned.

[NOTE: If markings according to 3.4.15 are displayed on the wagon or large container, information regarding the total gross mass is not required.**]**

3.4.13 (a) Wagons carrying packages with dangerous goods in limited quantities shall be marked in accordance with 3.4.15 on both sides except when placards are already affixed in accordance with 5.3.1.

(b) Large containers carrying packages with dangerous goods in limited quantities shall be marked in accordance with 3.4.15 on all four sides except when placards are already affixed in accordance with 5.3.1.

If the marking affixed to the large containers is not visible from outside the carrying wagon, the same marking shall also be affixed to both sides of the wagon.

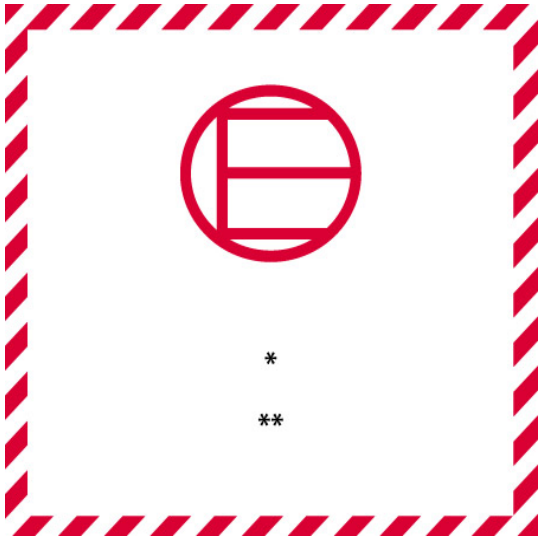
3.4.14 Markings specified in 3.4.13 may be dispensed with, if the total gross mass of the packages containing dangerous goods packed in limited quantities carried does not exceed 8 tonnes per wagon or large container.

3.4.15 The marking shall be that required in 3.4.7, except that the minimum dimensions shall be 250 mm × 250 mm."

Chapter 3.5

3.5.4.2 Amend the figure to read as follows:

"



Excepted quantities mark

Hatching and symbol of the same colour, black or red,

on white or suitable contrasting background

* The first or only label number indicated in column (5) of Table A of Chapter 3.2 shall be shown in this location.

** The name of the consignor or of the consignee shall be shown in this location if not shown elsewhere on the package."

PART 4

Chapter 4.1

4.1.1.1 At the end, replace "or reused":

with ", reused or remanufactured".

4.1.1.2 At the end of paragraph (a), delete:

"and".

At the end of paragraph (b), replace the full stop with:

"; and".

Add a new paragraph (c) to read as follows:

"(c) Shall not allow permeation of the dangerous goods that could constitute a danger under normal conditions of carriage."

4.1.1.19.6 In the table, for UN No. 3079 in column (3a), replace "3" with:

"6.1" and in column (3b), replace "FT1" with:

"TF1".

4.1.4.1

P 114b Amend special packing provision PP 48 to read as follows:

"**PP48** For UN Nos. 0508 and 0509, metal packagings shall not be used."

P 200 In paragraph (10), in special packing provision "k", amend the following:

– Amend first sentence to read as follows:

"Valve outlets shall be fitted with pressure retaining gas-tight plugs or caps having threads that match those of the valve outlets and made of material not liable to attack by the contents of the pressure receptacle."

– Amend the seventh paragraph ("Each valve shall have a taper threaded connection …") to read as follows:

"Each valve shall be capable of withstanding the test pressure of the pressure receptacle and be connected directly to the pressure receptacle by either a taper thread or other means which meets the requirements of ISO 10692-2:2001."

In paragraph (10), in special packing provision "q", amend the following:

– In the first sentence, at the beginning, replace "The valves" with:

  "Valve outlets".

– In the second sentence, at the end, replace "manifold outlet valve" with:

  "outlet of the manifold valve".

– In the second sentence before "gas-tight plug", add:

  "pressure retaining".

– Add a new third sentence to read as follows:

  "Gas-tight plugs or caps shall have threads that match those of the valve outlets."

In paragraph (10), in special packing provision "ra", amend the introductory phrase to read as follows:

"This gas may also be packed in capsules under the following conditions:"

In paragraph (10), amend special packing provision v to read as follows:

"v: (1) The interval between inspections for steel cylinders, other than refillable welded steel cylinders for UN Nos. 1011, 1075, 1965, 1969 or 1978, may be extended to 15 years:

(a) with the agreement of the competent authority (authorities) of the country (countries) where the periodic inspection and the carriage take place; and

(b) in accordance with the requirements of a technical code or a standard recognised by the competent authority.

(2) For refillable welded steel cylinders for UN Nos. 1011, 1075, 1965, 1969 or 1978, the interval may be extended to 15 years, if the provisions of paragraph (12) of this packing instruction are applied."

Insert a new paragraph (12) to read as follows:

"(12) An interval of 15 years for the periodic inspection of refillable welded steel cylinders may be granted in accordance with special packing provision v (2) of paragraph (10), if the following provisions are applied.

1. General provisions

1.1 For the application of this section, the competent authority shall not delegate its tasks and duties to Xb bodies (inspection bodies of type B) or IS bodies (in-house inspection services).

1.2 The owner of the cylinders shall apply to the competent authority for granting the 15 year interval, and shall demonstrate that the requirements of sub-paragraphs 2, 3 and 4 are met.

1.3 Cylinders manufactured since 1 January 1999 shall have been manufactured in conformity with the following standards:
– EN 1442; or
– EN 13322-1; or
– Annex I, parts 1 to 3 to Council Directive 84/527/EEC[3]
as applicable according to the table in 6.2.4 of RID.

Other cylinders manufactured before 1 January 2009 in conformity with RID in accordance with a technical code accepted by the national competent authority may be accepted for a 15 year interval, if they are of equivalent safety to the provisions of RID as applicable at the time of application.

1.4 The owner shall submit documentary evidence to the competent authority demonstrating that the cylinders comply with the provisions of sub-paragraph 1.3. The competent authority shall verify that these conditions are met.

1.5 The competent authority shall check whether the provisions of sub-paragraphs 2 and 3 are fulfilled and correctly applied. If all provisions are fulfilled, it shall authorise the 15-year interval for the cylinders. In this authorisation, the type of cylinder (as specified in the type approval) or a group of cylinders (see Note) covered shall be clearly identified. The authorisation shall be delivered to the owner; the competent authority shall keep a copy. The owner shall keep the documents for as long as the cylinders are authorised for a 15 year interval.

NOTE: A group of cylinders is defined by the production dates of identical cylinders for a period, during which the applicable provisions of RID and of the technical code accepted by the competent authority have not changed in their technical content. Example: Cylinders of identical design and volume having been manufactured according to the provisions of RID as applicable between 1 January 1985 and 31 December 1988 in combination with a technical code accepted by the competent authority applicable for the same period, form one group in terms of the provisions of this paragraph.

1.6 The competent authority shall monitor the owner of the cylinders for compliance with the provisions of RID and the authorisation given as appropriate, but at least every three years or when changes to the procedures are introduced.

2. Operational provisions

2.1 Cylinders having been granted a 15 year interval for periodic inspection shall only be filled in filling centres applying a documented quality system to ensure that all the provisions of paragraph (7) of this packing instruction and the requirements and responsibilities of EN 1439:2008 are fulfilled and correctly applied.

2.2 The competent authority shall verify that these requirements are fulfilled and check this as appropriate, but at least every three years or when changes to the procedures are introduced.

2.3 The owner shall provide documentary evidence to the competent authority that the filling centre complies with the provisions of sub-paragraph 2.1.

2.4 If a filling centre is situated in a different [RID Contracting State], the owner shall provide additional documentary evidence that the filling centre is monitored accordingly by the competent authority of that [RID Contracting State].

2.5 To prevent internal corrosion, only gases of high quality with very low potential contamination shall be filled into the cylinders. This is deemed to be fulfilled, if the gases conform to the corrosion contaminates level of EN 1440:2008, annex E.1, letter b.

3. Provisions for qualification and periodic inspection

3.1 Cylinders of a type or group already in use, for which a 15 year interval has been granted and to which the 15 year interval has been applied, shall be subject to a periodic inspection according to 6.2.3.5.

NOTE: For the definition of a group of cylinders, see Note to sub-paragraph 1.5.

3.2 If a cylinder with a 15-year interval fails the hydraulic pressure test during a periodic inspection e.g. by bursting or leakage, the owner shall investigate and produce a report on the cause of the failure and if other cylinders (e.g. of the same type or group) are affected. In the latter case, the owner shall inform the competent authority. The competent authority shall then decide on appropriate measures and inform the competent authorities of all other [RID Contracting States] accordingly.

3.3 If internal corrosion as defined in the standard applied (see sub-paragraph 1.3) has been detected, the cylinder shall be withdrawn from use and shall not be granted any further period for filling and carriage.

3.4 Cylinders having been granted a 15 year interval shall only be fitted with valves designed and manufactured for a minimum 15 year period of use according to EN 13152:2001 + A1:2003 or EN 13153:2001 + A1:2003. After a periodic inspection, a new valve shall be fitted to the cylinder, except that manually operated valves, which have been refurbished or inspected according to EN 14912:2005 may be re-fitted, if they are suitable for another 15 year period of use. Refurbishment or inspection shall only be carried out by the manufacturer of the valves or according to his technical instruction by an enterprise qualified for such work and operating under a documented quality system.

4. Marking

Cylinders having been granted a 15 year interval for periodic inspection in accordance with this paragraph shall additionally be marked clearly and legibly with "P15Y". This marking shall be removed if the cylinder is no longer authorised for a 15 year interval.

NOTE: This marking shall not apply to cylinders subject to the transitional provision in 1.6.2.9, 1.6.2.10 or the provisions of special packing provision v (1) of paragraph (10) of this packing instruction.

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[3] Council directive on the approximation of the laws of the Member States relating to welded unalloyed steel gas cylinders, published in the Official Journal of the European Communities No. L 300 from 19 November 1984."

Footnotes 3 and 4 become 4 and 5.

P 203 Amend to read as follows:

"

P 203	**PACKING INSTRUCTION**	**P 203**

This instruction applies to Class 2 refrigerated liquefied gases.

Requirements for closed cryogenic receptacles:

(1) The special packing provisions of 4.1.6 shall be met.

(2) The requirements of Chapter 6.2 shall be met.

(3) The closed cryogenic receptacles shall be so insulated that they do not become coated with frost.

(4) Test pressure

Refrigerated liquids shall be filled in closed cryogenic receptacles with the following minimum test pressures:

(a) For closed cryogenic receptacles with vacuum insulation, the test pressure shall not be less than 1.3 times the sum of the maximum internal pressure of the filled receptacle, including during filling and discharge, plus 100 kPa (1 bar);

(b) For other closed cryogenic receptacles, the test pressure shall be not less than 1.3 times the maximum internal pressure of the filled receptacle, taking into account the pressure developed during filling and discharge.

(5) Degree of filling

For non-flammable, non-toxic refrigerated liquefied gases (classification codes 3 A and 3 O) the volume of liquid phase at the filling temperature and at a pressure of 100 kPa (1 bar) shall not exceed 98% of the water capacity of the pressure receptacle.

For flammable refrigerated liquefied gases (classification code 3 F) the degree of filling shall remain below the level at which, if the contents were raised to the temperature at which the vapour pressure equalled the opening pressure of the relief valve, the volume of the liquid phase would reach 98% of the water capacity at that temperature.

(6) Pressure-relief devices

Closed cryogenic receptacles shall be fitted with at least one pressure-relief device.

(7) Compatibility

Materials used to ensure the leakproofness of the joints or for the maintenance of the closures shall be compatible with the contents. In the case of receptacles intended for the carriage of oxidizing gases (classification code 3 O), these materials shall not react with these gases in a dangerous manner.

Requirements for open cryogenic receptacles:

Only the following non oxidizing refrigerated liquefied gases of classification code 3 A may be carried in open cryogenic receptacles: UN Nos. 1913, 1951, 1963, 1970, 1977, 2591, 3136 and 3158.

Open cryogenic receptacles shall be constructed to meet the following requirements:

(1) The receptacles shall be designed, manufactured, tested and equipped in such a way as to withstand all conditions, including fatigue, to which they will be subjected during their normal use and during normal conditions of carriage.

(2) The capacity shall be not more than 450 litres.

(3) The receptacle shall have a double wall construction with the space between the inner and outer wall being evacuated (vacuum insulation). The insulation shall prevent the formation of hoar frost on the exterior of the receptacle.

(4) The materials of construction shall have suitable mechanical properties at the service temperature.

(5) Materials which are in direct contact with the dangerous goods shall not be affected or weakened by the dangerous goods intended to be carried and shall not cause a dangerous effect, e.g. catalysing a reaction or reacting with the dangerous goods.

(6) Receptacles of glass double wall construction shall have an outer packaging with suitable cushioning or absorbent materials which withstand the pressures and impacts liable to occur under normal conditions of carriage.

(7) The receptacle shall be designed to remain in an upright position during carriage, e.g. have a base whose smaller horizontal dimension is greater than the height of the centre of gravity when filled to capacity or be mounted on gimbals.

(8) The openings of the receptacles shall be fitted with devices allowing gases to escape, preventing any splashing out of liquid, and so configured that they remain in place during carriage.

(9) Open cryogenic receptacles shall bear the following marks permanently affixed e.g. by stamping, engraving or etching:

– The manufacturer's name and address;

– The model number or name;

– The serial or batch number;

– The UN number and proper shipping name of gases for which the receptacle is intended;

– The capacity of the receptacle in litres.

"

Add the following new packing instruction:

"

P 205	PACKING INSTRUCTION	P 205

This instruction applies to UN No. 3468.

(1) For metal hydride storage systems, the special packing provisions of 4.1.6 shall be met.

(2) Only pressure receptacles not exceeding 150 litres in water capacity and having a maximum developed pressure not exceeding 25 MPa are covered by this packing instruction.

(3) Metal hydride storage systems meeting the applicable requirements for the construction and testing of pressure receptacles containing gas of Chapter 6.2 are authorised for the carriage of hydrogen only.

(4) When steel pressure receptacles or composite pressure receptacles with steel liners are used, only those bearing the "H" mark, in accordance with 6.2.2.9.2 (j) shall be used.

(5) Metal hydride storage systems shall meet the service conditions, design criteria, rated capacity, type tests, batch tests, routine tests, test pressure, rated charging pressure and provisions for pressure relief devices for transportable metal hydride storage systems specified in ISO 16111:2008 (Transportable gas storage devices – Hydrogen absorbed in reversible metal hydride) and their conformity and approval shall be assessed in accordance with 6.2.2.5.

(6) Metal hydride storage systems shall be filled with hydrogen at a pressure not exceeding the rated charging pressure shown in the permanent markings on the system as specified by ISO 16111:2008.

(7) The periodic test requirements for a metal hydride storage system shall be in accordance with ISO 16111:2008 and carried out in accordance with 6.2.2.6, and the interval between periodic inspections shall not exceed five years.

"

P 402 In special packing provision specific to RID and ADR RR 8, replace "and 3148" with:

", 3148 and 3482".

P 601 (1) and
P 602 (1) In the first indent, replace "capacity of 1 litre" with:

"net quantity of 1 litre".

P 620 Add the following new additional requirement:

"4. Other dangerous goods shall not be packed in the same packaging as Class 6.2 infectious substances unless they are necessary for maintaining the viability, stabilizing or preventing degradation or neutralizing the hazards of the infectious substances. A quantity of 30 ml or less of dangerous goods included in Classes 3, 8 or 9 may be packed in each primary receptacle containing infectious substances. These small quantities of dangerous goods of Classes 3, 8 or 9 are not subject to any additional requirements of RID when packed in accordance with this packing instruction."

Renumber existing additional requirement 4 as 5.

P 621 In the second sentence, insert after "4.1.1":

", except 4.1.1.15,".

P 650 (9) (a) In the Note, insert before "requirements to be met":

"other".

P 901 Replace "Maximum quantity of dangerous goods per outer packaging: 10 kg." with:

"The quantity of dangerous goods per outer packaging shall not exceed 10 kg, excluding the mass of any carbon dioxide, solid, (dry ice) used as a refrigerant."

Amend "Additional requirement" to read as follows:

"Additional requirements".

Under "Additional requirements", add the following new text:

"Dry ice

When carbon dioxide, solid, (dry ice) is used as a refrigerant, the packaging shall be designed and constructed to permit the release of the gaseous carbon dioxide to prevent the build up of pressure that could rupture the packaging."

P 904 Amend to read as follows:

"

P 904	PACKING INSTRUCTION	P 904

This instruction applies to UN No. 3245.

The following packagings are authorized:

(1) Packagings meeting the provisions of 4.1.1.1, 4.1.1.2, 4.1.1.4, 4.1.1.8 and 4.1.3 and so designed that they meet the construction requirements of 6.1.4. Outer packagings constructed of suitable material of adequate strength and designed in relation to the packaging capacity and its intended use shall be used. Where this packing instruction is used for the carriage of inner packagings of combination packagings the packaging shall be designed and constructed to prevent inadvertent discharge during normal conditions of carriage.

(2) Packagings, which need not conform to the packaging test requirements of Part 6, but conforming to the following:

(a) An inner packaging comprising:

(i) primary receptacle(s) and a secondary packaging, the primary receptacle(s) or the secondary packaging shall be leakproof for liquids or siftproof for solids;

(ii) for liquids, absorbent material placed between the primary receptacle(s) and the secondary packaging. The absorbent material shall be in a quantity sufficient to absorb the entire contents of the primary receptacle(s) so that any release of the liquid substance will not compromise the integrity of the cushioning material or of the outer packaging;

(iii) if multiple fragile primary receptacles are placed in a single secondary packaging they shall be individually wrapped or separated to prevent contact between them;

(b) An outer packaging shall be strong enough for its capacity, mass and intended use, and with a smallest external dimension of at least 100 mm.

For carriage, the mark illustrated below shall be displayed on the external surface of the outer packaging on a background of a contrasting colour and shall be clearly visible and legible. The mark shall be in the form of a square set at an angle of 45° (diamond-shaped) with each side having a length of at least 50 mm; the width of the line shall be at least 2 mm and the letters and numbers shall be at least 6 mm high.

Additional requirement

Ice, dry ice and liquid nitrogen

When dry ice or liquid nitrogen is used, all applicable requirements of RID shall be met. When used, ice or dry ice shall be placed outside the secondary packagings or in the outer packaging or an overpack. Interior supports shall be provided to secure the secondary packagings in the original position after the ice or dry ice has dissipated. If ice is used, the outside packaging or overpack shall be leakproof. If carbon dioxide, solid (dry ice) is used, the packaging shall be designed and constructed to permit the release of carbon dioxide gas to prevent a build-up of pressure that

could rupture the packagings and the package (the outer packaging or the overpack) shall be marked "Carbon dioxide, solid" or "Dry ice".

NOTE: If dry ice is used, there are no other requirements to be met (see 2.2.9.1.14). If liquid nitrogen is used, it is sufficient to comply with Chapter 3.3, special provision 593.

The primary receptacle and the secondary packaging shall maintain their integrity at the temperature of the refrigerant used as well as the temperatures and the pressures which could result if refrigeration were lost.

"

4.1.4.2

IBC 04 Replace ", 21N, 31A, 31B and 31N" with:

"and 21N".

IBC 05 In (1), replace ", 21N, 31A, 31B and 31N" with:

"and 21N".

In (2), replace ", 21H2, 31H1 and 31H2" with:

"and 21H2".

In (3), replace ", 21HZ1 and 31HZ1" with:

"and 21HZ1".

IBC 06, **IBC 07** and **IBC 08** In (1), replace ", 21N, 31A, 31B and 31N" with:

"and 21N".

In (2), replace ", 21H2, 31H1 and 31H2" with:

"and 21H2".

In (3), replace ", 21HZ2, 31HZ1 and 31HZ2" with:

"and 21HZ2".

IBC 06 Amend the additional requirement to read as follows:

"**Additional requirement**

Where the solid may become liquid during carriage see 4.1.3.4."

IBC 07 Amend the additional requirement to read as follows:

"**Additional requirements**

1. Where the solid may become liquid during carriage see 4.1.3.4.

2. Liners of wooden IBCs shall be siftproof."

IBC 08 In special packing provision B13, replace "and 2880" with:

", 2880, 3485, 3486 and 3487".

Add the following new additional requirement:

"**Additional requirement**

Where the solid may become liquid during carriage see 4.1.3.4."

IBC 520 For UN No. 3109, in the entry for Peroxyacetic acid, stabilized, not more than 17% (last entry), add "31H2" in column "Type of IBC" and add "1500" in column "Maximum quantity (litres/kg)" against this code.

IBC 620 In the second sentence, insert after "4.1.1":

", except 4.1.1.15".

4.1.5.5 Amend to read as follows:

"**4.1.5.5** Unless otherwise specified in RID, packagings, including IBCs and large packagings, shall conform to the requirements of chapters 6.1, 6.5 or 6.6, as appropriate, and shall meet their test requirements for packing group II."

4.1.6.10 Amend the first sentence to read:

"Refillable pressure receptacles, other than cryogenic receptacles, shall be periodically inspected according to the provisions of 6.2.1.6, or 6.2.3.5.1 for non UN receptacles, and packing instruction P 200 or P 205 as applicable."

4.1.6.14 becomes **4.1.6.15**. Insert the following new row at the end of the table:

4.1.6.8 (b) and (c)	ISO 16111:2008	Transportable gas storage devices – Hydrogen absorbed in reversible metal hydride

Insert the following new paragraph 4.1.6.14:

"**4.1.6.14** Owners shall, on the basis of a reasoned request from the competent authority, provide it with all the information necessary to demonstrate the conformity of the pressure receptacle in a language easily understood by the competent authority. They shall cooperate with that authority, at its request, on any action taken to eliminate non-conformity of the pressure receptacles which they own."

4.1.7.1 Amend the heading to read as follows:

"Use of packagings (except IBCs)".

4.1.7.1.1 Amend to read as follows:

"**4.1.7.1.1** Packagings for organic peroxides and self-reactive substances shall conform to the requirements of Chapter 6.1 and shall meet its test requirements for packing group II."

4.1.7.2.1 At the end, add the following new sentence:

"IBCs shall conform to the requirements of Chapter 6.5 and shall meet its test requirements for packing group II."

4.1.9.1.5 Amend to read as follows:

"**4.1.9.1.5** For radioactive material having other dangerous properties the package design shall take into account those properties. Radioactive material with a subsidiary risk, packaged in packages that do not require competent authority approval, shall be carried in packagings, IBCs, tanks or bulk containers fully complying with the requirements of the relevant chapters of Part 6 as appropriate, as well as applicable requirements of chapters 4.1, 4.2 or 4.3 for that subsidiary risk."

4.1.9.3 (a) Insert after "a mass of fissile material":

"(or mass of each fissile nuclide for mixtures when appropriate)".

Chapter 4.2

4.2.5.2.6 In the table for portable tank instructions T 1 – T 22, add a reference to a new footnote b after "Bottom opening requirements" in the heading of the last column.

The footnote shall read as follows:

"[b] When this column indicates "Not allowed", bottom openings are not permitted when the substance to be carried is a liquid (see 6.7.2.6.1). When the substance to be carried is a solid at all temperatures encountered under normal conditions of carriage, bottom openings conforming to the requirements of 6.7.2.6.2 are authorized."

4.2.5.3 Add the following new special provisions TP 36 and TP 37:

"**TP 36** Fusible elements in the vapour space may be used on portable tanks.

TP 37 The portable tank instructions prescribed in RID applicable up to 31 December 2010 may continue to be applied until 31 December 2016."

Chapter 4.3

4.3.4.1.3 In sub-paragraph (b), in the designation for UN 2447, delete:

"or YELLOW".

In paragraph (c), replace "and UN No. 3404 POTASSIUM SODIUM ALLOYS, SOLID" with:

", UN No. 3404 POTASSIUM SODIUM ALLOYS, SOLID and UN No. 3482 ALKALI METAL DISPERSION, FLAMMABLE or UN No. 3482 ALKALINE EARTH METAL DISPERSION, FLAMMABLE".

PART 5

Chapter 5.1

5.1.5.1.4 In paragraph (a), insert after "have been submitted to":

"the competent authority of the country of origin of the shipment and to".

In paragraph (b), insert after "shall notify":

"the competent authority of the country of origin of the shipment and".

In sub-paragraph (d) (v), insert after "the mass of fissile material":

"(or of each fissile nuclide for mixtures when appropriate)".

5.1.5.3.4 In paragraphs (d) and (e), replace "when otherwise specified in the competent authority approval certificate of the country of origin of design (see 2.2.7.2.4.6)" with:

"under the provisions of 5.1.5.3.5".

Add a new paragraph 5.1.5.3.5 to read as follows:

"**5.1.5.3.5** In all cases of international carriage of packages requiring competent authority design or shipment approval, for which different approval types apply in the different countries concerned by the shipment, the categorization shall be in accordance with the certificate of the country of origin of design."

5.1.5.4 becomes **5.1.5.5**.

Insert a new sub-section 5.1.5.4 to read as follows:

"**5.1.5.4 Specific provisions for excepted packages**

5.1.5.4.1 Excepted packages shall be legibly and durably marked on the outside of the packaging with:

(a) The UN number preceded by the letters "UN";

(b) An identification of either the consignor or consignee, or both; and

(c) The permissible gross mass if this exceeds 50 kg.

5.1.5.4.2 The documentation requirements of Chapter 5.4 do not apply to excepted packages of radioactive material, except that the UN number preceded by the letters "UN" and the name and address of the consignor and the consignee shall be shown on a transport document such as a bill of lading, air waybill or CMR/CIM consignment note."

Chapter 5.2

5.2.1.6 (a) [This amendment in the German version does not apply to the English version.]

5.2.1.7.2 Amend the second sentence to read:

"The marking of excepted packages shall be as required by 5.1.5.4.1."

5.2.1.7.8 Amend to read as follows:

"**5.2.1.7.8** In all cases of international carriage of packages requiring competent authority design or shipment approval, for which different approval types apply in the different countries concerned by the shipment, marking shall be in accordance with the certificate of the country of origin of the design."

5.2.1.8.1 Amend to read as follows:

"**5.2.1.8.1** Packages containing environmentally hazardous substances meeting the criteria of 2.2.9.1.10 shall be durably marked with the environmentally hazardous substance mark shown in 5.2.1.8.3 with the exception of single packagings and combination packagings where such single packagings or inner packagings of such combination packagings have:

– a net quantity of 5 l or less for liquids; or

– a net mass of 5 kg or less for solids."

5.2.1.9.1 Replace "ISO 780:1985" with:

"ISO 780:1997".

5.2.1.9.2 At the end of sub-paragraph (d), delete:

"or".

At the end of sub-paragraph (e), replace the full stop with:

"; or".

Add a new sub-paragraph (f) to read as follows:

"(f) Combination packagings containing hermetically sealed inner packagings each containing not more than 500 ml."

5.2.2.1.8 [This amendment in the German version does not apply to the English version.]

5.2.2.1.11.2 In the second sentence of sub-paragraph (b), insert after "the mass of fissile material":

"(or mass of each fissile nuclide for mixtures when appropriate)".

5.2.2.1.11.5 Amend to read as follows:

"**5.2.2.1.11.5** In all cases of international carriage of packages requiring competent authority design or shipment approval, for which different approval types apply in the different countries concerned by the shipment, labelling shall be in accordance with the certificate of the country of origin of design."

5.2.2.2.2 In the title of lable No. 4.1, replace "desensitized explosives" with:

"solid desensitized explosives".

Chapter 5.3

5.3.2.1.5 [This amendment in the German version does not apply to the English version.]

5.3.2.3.2 Insert the following new line after the line for code "668":

"X668 highly toxic substance, corrosive, which reacts dangerously with water[3]".

5.3.4.1 [This amendment in the German version does not apply to the English version.]

Chapter 5.4

5.4.0 Amend to read as follows:

"**5.4.0 General**

5.4.0.1 Unless otherwise specified, any carriage of goods governed by RID shall be accompanied by the documentation prescribed in this Chapter, as appropriate.

5.4.0.2 The use of electronic data processing (EDP) or electronic data interchange (EDI) techniques as an aid to or instead of paper documentation is permitted, provided that the procedures used for the capture, storage and processing of electronics data meet the legal requirements as regards the evidential value and availability of data during transport in a manner at least equivalent to that of paper documentation.

5.4.0.3 When the dangerous goods transport information is given to the carrier by EDP or EDI techniques, the consignor shall be able to give the information to the carrier as a paper document, with the information in the sequence required by this Chapter."

5.4.1.1.1 (e) At the end, add the following new note:

"**NOTE:** The number, type and capacity of each inner packaging within the outer packaging of a combination packaging is not required to be indicated."

5.4.1.1.3 In the first paragraph, delete:

"the UN number and".

In the first paragraph, amend the four examples to read as follows:

"– "UN 1230 WASTE METHANOL, 3 (6.1), II" or
– "UN 1230 WASTE METHANOL, 3 (6.1), PG II" or
– "UN 1993 WASTE FLAMMABLE LIQUID, N.O.S. (toluene and ethyl alcohol), 3, II" or
– "UN 1993 WASTE FLAMMABLE LIQUID, N.O.S. (toluene and ethyl alcohol), 3, PG II"."

Delete the second paragraph including the two examples.

[The amendment in the German version concerning the last sub-paragraph does not apply to the English text.]

5.4.1.1.6.1 At the end, replace "proper shipping name required in 5.4.1.1.1 (b)" with:

"dangerous goods description specified in 5.4.1.1.1 (j) and (a) to (d)".

5.4.1.1.7 In footnote 5, replace "5.4.4" with:

"5.4.5" (twice).

Add a new paragraph 5.4.1.1.18 to read as follows:

"**5.4.1.1.18 Special provisions for carriage of environmentally hazardous substances (aquatic environment)**

When a substance belonging to one of classes 1 to 9 meets the classification criteria of 2.2.9.1.10, the transport document shall bear the additional inscription "ENVIRONMENTALLY HAZARDOUS". This additional requirement does not apply to UN Nos. 3077 and 3082 or for the exceptions listed in 5.2.1.8.1.

The inscription "MARINE POLLUTANT" (according to chapter 5.4.1.4.3 of the IMDG Code) instead of "ENVIRONMENTALLY HAZARDOUS" is acceptable for carriage in a transport chain including maritime carriage."

5.4.1.2.1 Amend sup-paragraph (g) to read as follows:

"(g) When fireworks of UN Nos. 0333, 0334, 0335, 0336 and 0337 are carried, the transport document shall bear the inscription:

"CLASSIFICATION OF FIREWORKS BY THE COMPETENT AUTHORITY OF XX WITH THE FIREWORK REFERENCE XX/YYZZZZ".

The classification approval certificate need not be carried with the consignment, but shall be made available by the consignor to the carrier or the competent authorities for control purposes. The classification approval certificate or a copy of it shall be in an official language of the forwarding country, and also, if that language is not German, English, French or Italian, in German, English, French or Italian."

Renumber the existing Note as Note 1.

Add a new Note 2 to read as follows:

"**2:** The classification reference(s) shall consist of the **[**RID Contracting State**]** in which the classification code according to special provision 645 of 3.3.1 was approved, indicated by the distinguishing sign for motor vehicles in international traffic (XX)[6], the competent authority identification (YY) and a unique serial reference (ZZZZ). Examples of such classification references are:

GB/HSE123456
D/BAM1234".

[6] Distinguishing sign for motor vehicles in international traffic prescribed in Vienna Convention on Road Traffic (1968)."

Footnotes 6 to 8 become 7 bis 9.

5.4.1.2.2 (a) [This amendment in the German version does not apply to the English text.]

5.4.1.2.5.1 In the second sentence of sub-paragraph (c), insert after "the mass of fissile material":

"(or mass of each fissile nuclide for mixtures when appropriate)".

At the end of sub-paragraph (j), add:

"For radioactive material for which the A_2 value is unlimited, the multiple of A_2 shall be zero."

5.4.1.2.5.3 Amend to read as follows:

"**5.4.1.2.5.3** In all cases of international carriage of packages requiring competent authorities design or shipment approval, for which different approval types apply in the different countries concerned by the shipment, the UN number and proper shipping name required in 5.4.1.1.1 shall be in accordance with the certificate of the country of origin of design."

5.4.1.4.2 In the last sub-paragraph, replace "5.4.4" with:

"5.4.5".

5.4.2 Amend the heading to read as follows:

"**5.4.2 Large container or wagon packing certificate**".

[In footnote 9 (actual footnote 8), amend 5.4.2.3 to read as follows:

"**5.4.2.3** If the dangerous goods documentation is presented to the carrier by means of EDP or EDI transmission techniques, the signature(s) may be electronic signature(s) or may be replaced by the name(s) (in capitals) of the person authorized to sign."**]**

[to be checked after finalisation of draft amendments to section 5.4.2 of the IMDG code by IMO]

[In footnote 9 (actual footnote 8), add a new paragraph 5.4.2.4 to read as follows:

"**5.4.2.4** When the dangerous goods transport information is given to a carrier by EDP or EDI techniques and subsequently the dangerous goods are transferred to a carrier that requires a paper dangerous goods transport document, the carrier shall ensure that the paper document indicates "Original received electronically" and the name of the signatory shall be shown in capital letters."**]**

[to be checked after finalisation of draft amendments to section 5.4.2 of the IMDG code by IMO]

5.4.4 Becomes **5.4.5**.

Insert a new section 5.4.4 to read as follows:

"**5.4.4 Retention of dangerous goods transport information**

5.4.4.1 The consignor and the carrier shall retain a copy of the dangerous goods transport document and additional information and documentation as specified in RID, for a minimum period of three months.

5.4.4.2 When the documents are kept electronically or in a computer system, the consignor and the carrier shall be able to reproduce them in a printed form."

Chapter 5.5 Amend to read as follows:

"**Chapter 5.5**

Special provisions

5.5.1 (Deleted)

5.5.2 Special provisions applicable to fumigated cargo transport units (UN 3359)

5.5.2.1 General

5.5.2.1.1 Fumigated cargo transport units (UN 3359) containing no other dangerous goods are not subject to any provisions of RID other than those of this section.

NOTE: For the purposes of this Chapter, cargo transport unit means a wagon, a container, a tank-container, a portable tank or a MEGC.

5.5.2.1.2 When the fumigated cargo transport unit is loaded with dangerous goods in addition to the fumigant, any provision of RID relevant to these goods (including placarding, marking and documentation) applies in addition to the provisions of this section.

5.5.2.1.3 Only cargo transport units that can be closed in such a way that the escape of gas is reduced to a minimum shall be used for the carriage of cargo under fumigation.

5.5.2.2 Training

Persons engaged in the handling of fumigated cargo transport units shall be trained commensurate with their responsibilities.

5.5.2.3 Marking and placarding

5.5.2.3.1 A fumigated cargo transport unit shall be marked with a warning mark, as specified in 5.5.2.3.2, affixed at each access point in a location where it will be easily seen by persons opening or entering the cargo transport unit. This mark shall remain on the cargo transport unit until the following provisions are met:

(a) The fumigated cargo transport unit has been ventilated to remove harmful concentrations of fumigant gas; and

(b) The fumigated goods or materials have been unloaded.

5.5.2.3.2 The fumigation warning mark shall be rectangular and shall not be less than 300 mm wide and 250 mm high. The markings shall be in black print on a white background with lettering not less than 25 mm high. An illustration of this mark is given in the figure below.

Fumigation warning mark

[Existing fumigation warning sign unchanged)]

5.5.2.3.3 If the fumigated cargo transport unit has been completely ventilated either by opening the doors of the unit or by mechanical ventilation after fumigation, the date of ventilation shall be marked on the fumigation warning mark.

5.5.2.3.4 When the fumigated cargo transport unit has been ventilated and unloaded, the fumigation warning mark shall be removed.

5.5.2.3.5 Placards conforming to model No. 9 (see 5.2.2.2.2) shall not be affixed to a fumigated cargo transport unit except as required for other Class 9 substances or articles packed therein.

5.5.2.4 Documentation

5.5.2.4.1 Documents associated with the carriage of cargo transport units that have been fumigated and have not been completely ventilated before carriage shall include the following information:

– "UN 3359 FUMIGATED CARGO TRANSPORT UNIT, 9", or "UN 3359 FUMIGATED CARGO TRANSPORT UNIT, Class 9";

– The date and time of fumigation; and

– The type and amount of the fumigant used.

These particulars shall be drafted in an official language of the forwarding country and also, if the language is not English, French, German or Italian, in English, French, German or Italian, unless agreements, if any, concluded between the countries concerned in the transport operation provide otherwise.

5.5.2.4.2 The transport document may be in any form, provided it contains the information required in 5.5.2.4.1. This information shall be easy to identify, legible and durable.

5.5.2.4.3 Instructions for disposal of any residual fumigant including fumigation devices (if used) shall be provided.

5.5.2.4.4 A document is not required when the fumigated cargo transport unit has been completely ventilated and the date of ventilation has been marked on the warning mark (see 5.5.2.3.3 and 5.5.2.3.4)."

PART 6

Chapter 6.1

6.1.3.1 (a) (i) Amend the second sentence to read as follows:

"This symbol shall not be used for any purpose other than certifying that a packaging, a portable tank or a MEGC complies with the relevant requirements in Chapter 6.1, 6.2, 6.3, 6.5, 6.6 or 6.7."

6.1.4 Add a new sub-section 6.1.4.0 to read as follows:

"**6.1.4.0 General requirements**

Any permeation of the substance contained in the packaging shall not constitute a danger under normal conditions of carriage."

6.1.5.3.6.3 Amend to read as follows:

"**6.1.5.3.6.3** The packaging or outer packaging of a composite or combination packaging shall not exhibit any damage liable to affect safety during carriage. Inner receptacles, inner packagings, or articles shall remain completely within the outer packaging and

there shall be no leakage of the filling substance from the inner receptacle(s) or inner packaging(s)."

Chapter 6.2

6.2.1 Transfer the note after the heading after the chapter heading.

6.2.1.1.5 At the end, add the following new sentence:

"The test pressure of a metal hydride storage system shall be in accordance with packing instruction P 205 of 4.1.4.1."

6.2.1.3.4 After "P 200 (2)", insert:

"or P 205".

6.2.1.5.1 After "cryogenic receptacles", insert:

"and metal hydride storage systems".

Add a new paragraph 6.2.1.5.3 to read as follows:

"**6.2.1.5.3** For metal hydride storage systems, it shall be verified that the inspections and tests specified in 6.2.1.5.1 (a), (b), (c), (d), (e) if applicable, (f), (g), (h) and (i) have been performed on an adequate sample of the receptacles used in the metal hydride storage system. In addition, on an adequate sample of metal hydride storage systems, the inspections and tests specified in 6.2.1.5.1 (c) and (f) shall be performed, as well as 6.2.1.5.1 (e), if applicable, and inspection of the external conditions of the metal hydride storage system.

Additionally, all metal hydride storage systems shall undergo the initial inspections and tests specified in 6.2.1.5.1 (h) and (i), as well as a leakproofness test and a test of the satisfactory operation of the service equipment."

6.2.1.6.1 In Note 2, delete:

", ultrasonic examination".

Add the following new sentence at the end of Note 2:

"ISO 16148:2006 may be used as a guide for acoustic emission testing procedures."

Insert a new Note 3 to read as follows:

"**3:** The hydraulic pressure test may be replaced by ultrasonic examination carried out in accordance with ISO 10461:2005 + A1:2006 for seamless aluminium alloy gas cylinders and in accordance with ISO 6406:2005 for seamless steel gas cylinders."

Renumber Note 3 as Note 4.

6.2.2.1.1 In the table, add the following three new entries after "ISO 7866:1999":
"

ISO 4706:2008	Gas cylinders – Refillable welded steel cylinders – Test pressure 60 bar and below
ISO 18172-1:2007	Gas cylinders – Refillable welded stainless steel cylinders – Part 1: Test pressure 6 MPa and below

ISO 20703:2006	Gas cylinders – Refillable welded aluminium-alloy cylinders – Design, construction and testing

"

Add a new paragraph 6.2.2.1.5 to read as follows:

"**6.2.2.1.5** The following standard applies for the design, construction, and initial inspection and test of UN metal hydride storage systems, except that inspection requirements related to the conformity assessment system and approval shall be in accordance with 6.2.2.5:

ISO 16111:2008	Transportable gas storage devices – Hydrogen absorbed in reversible metal hydride

"

6.2.2.2 At the beginning, in the text between brackets, insert after "P 200":

"or P 205".

6.2.2.3 At the end, add the following new sub-paragraph:

"For UN metal hydride storage systems, the requirements specified in the following standard apply to closures and their protection:

ISO 16111:2008	Transportable gas storage devices – Hydrogen absorbed in reversible metal hydride

"

6.2.2.4 At the beginning, insert after "UN cylinders":

"and UN metal hydride storage systems".

At the end of the table, add the following new entry:

"

ISO 16111:2008	Transportable gas storage devices – Hydrogen absorbed in reversible metal hydride

"

6.2.2.6.5 At the end of the first sub-paragraph, replace "(see 6.2.2.7.6)" with:

"(see 6.2.2.7.7)".

6.2.2.7 After the heading, add the following new note:

"**NOTE:** Marking requirements for UN metal hydride storage systems are given in 6.2.2.9."

Assign paragraph number **6.2.2.7.1** to the first unnumbered paragraph under 6.2.2.7.

Paragraphs **6.2.2.7.1** to **6.2.2.7.7** become **6.2.2.7.2** to **6.2.2.7.8**.

6.2.2.7.2 (a) (existing 6.2.2.7.1 (a)) Amend the second sentence to read as follows:

"This symbol shall not be used for any purpose other than certifying that a packaging, a portable tank or a MEGC complies with the relevant requirements in Chapter 6.1, 6.2, 6.3, 6.5, 6.6 or 6.7;".

6.2.2.7.5 (previous 6.2.2.7.4) In the first indent, replace "6.2.2.7.3" with:

"6.2.2.7.4".

In the second indent, replace "6.2.2.7.2" with:

"6.2.2.7.3".

In the third indent, replace "6.2.2.7.1" with:

"6.2.2.7.2".

Add a new paragraph 6.2.2.7.9 to read as follows:

"**6.2.2.7.9** For bundles of cylinders, pressure receptacle marking requirements shall only apply to the individual cylinders of a bundle and not to any assembly structure."

6.2.2.8 Assign paragraph number **6.2.2.8.1** to the first unnumbered paragraph under 6.2.2.8.

Paragraphs **6.2.2.8.1** to **6.2.2.8.3** become **6.2.2.8.2** to **6.2.2.8.4**.

6.2.2.8.2 (previous 6.2.2.8.1) Replace "6.2.2.7.1 to 6.2.2.7.3" with:

"6.2.2.7.2 to 6.2.2.7.4".

6.2.2.8.3 (previous 6.2.2.8.2) Replace "6.2.2.7.4" with:

"6.2.2.7.5".

6.2.2.9 becomes **6.2.2.10**.

Replace "1.8.6.4" with:

"1.8.6.2, 1.8.6.4, 1.8.6.5 and 1.8.6.8" (thrice).

Add a new sub-section 6.2.2.9 to read as follows:

"**6.2.2.9 Marking of UN metal hydride storage systems**

6.2.2.9.1 UN metal hydride storage systems shall be marked clearly and legibly with the marks listed below. These marks shall be permanently affixed (e.g. stamped, engraved, or etched) on the metal hydride storage system. The marks shall be on the shoulder, top end or neck of the metal hydride storage system or on a permanently affixed component of the metal hydride storage system. Except for the United Nations packaging symbol, the minimum size of the marks shall be 5 mm for metal hydride storage systems with a smallest overall dimension greater than or equal to 140 mm and 2.5 mm for metal hydride storage systems with a smallest overall dimension less than 140 mm. The minimum size of the United Nations packaging symbol shall be 10 mm for metal hydride storage systems with a smallest overall dimension greater than or equal to 140 mm and 5 mm for metal hydride storage systems with a smallest overall dimension less than 140 mm.

6.2.2.9.2 The following marks shall be applied:

(a) The United Nations packaging symbol 

;

This symbol shall not be used for any purpose other than certifying that a packaging, a portable tank or a MEGC complies with the relevant requirements in Chapter 6.1, 6.2, 6.3, 6.5, 6.6 or 6.7;

(b) "ISO 16111" (the technical standard used for design, manufacture and testing);

(c) The character(s) identifying the country of approval as indicated by the distinguishing signs of motor vehicles in international traffic[2];

NOTE: The country of approval shall be understood to be the country that approved the body which inspected the individual receptacle at the time of manufacture.

(d) The identity mark or stamp of the inspection body that is registered with the competent authority of the country authorizing the marking;

(e) The date of the initial inspection, the year (four digits) followed by the month (two digits) separated by a slash (i.e. "/");

(f) The test pressure of the receptacle in bar, preceded by the letters "PH" and followed by the letters "BAR";

(g) The rated charging pressure of the metal hydride storage system in bar, preceded by the letters "RCP" and followed by the letters "BAR";

(h) The manufacturer's mark registered by the competent authority. When the country of manufacture is not the same as the country of approval, then the manufacturer's mark shall be preceded by the character(s) identifying the country of manufacture as indicated by the distinguishing signs of motor vehicles in international traffic[2]. The country mark and the manufacturer's mark shall be separated by a space or slash;

(i) The serial number assigned by the manufacturer;

(j) In the case of steel receptacles and composite receptacles with steel liner, the letter "H" showing compatibility of the steel (see ISO 11114-1:1997); and,

(k) In the case of metal hydride storage systems having limited life, the date of expiry, denoted by the letters "FINAL" followed by the year (four digits) followed by the month (two digits) separated by a slash (i.e. "/").

The certification marks specified in (a) to (e) above shall appear consecutively in the sequence given. The test pressure (f) shall be immediately preceded by the rated charging pressure (g). The manufacturing marks specified in (h) to (k) above shall appear consecutively in the sequence given.

6.2.2.9.3 Other marks are allowed in areas other than the side wall, provided they are made in low stress areas and are not of a size and depth that will create harmful stress concentrations. Such marks shall not conflict with required marks.

6.2.2.9.4 In addition to the preceding marks, each metal hydride storage system that meets the periodic and test requirements of 6.2.2.4 shall be marked indicating:

(a) The character(s) identifying the country authorizing the body performing the periodic inspection and test, as indicated by the distinguishing sign of motor vehicles in international traffic[2] This marking is not required if this body is approved by the competent authority of the country approving manufacture;

(b) The registered mark of the body authorised by the competent authority for performing periodic inspection and test;

(c) The date of the periodic inspection and test, the year (two digits) followed by the month (two digits) separated by a slash (i.e. "/"). Four digits may be used to indicate the year.

The above marks shall appear consecutively in the sequence given.

[2] Distinguishing signs for motor vehicles in international traffic prescribed in the Vienna Convention on Road Traffic (1968)."

6.2.3.5.1 [This amendment in the German version does not apply to the English text.]

6.2.3.5.2 Amend to read as follows:

"**6.2.3.5.2** (Deleted)".

6.2.3.6.1 Replace "1.8.6.4" with:

"1.8.6.2, 1.8.6.4, 1.8.6.5 and 1.8.6.8" (thrice).

6.2.3.9.2 Replace "6.2.2.7.1 (a)" with:

"6.2.2.7.2 (a)".

6.2.3.9.3 Replace "6.2.2.7.2 (j)" with:

"6.2.2.7.3 (j)".

6.2.3.9.4 Replace "6.2.2.7.2 (g) and (h) and 6.2.2.7.3 (m)" with:

"6.2.2.7.3 (g) and (h) and 6.2.2.7.4 (m)".

6.2.3.9.5 Replace "6.2.2.7.6 (c)" with:

"6.2.2.7.7 (c)".

[The second amendment in the German version does not apply to the English text.]

6.2.3.9.6 Replace "6.2.2.7.6" with:

"6.2.2.7.7".

6.2.3.10.1 Replace "6.2.2.7.1 (a)" with:

"6.2.2.7.2 (a)".

6.2.4 Amend to read as follows:

"**6.2.4 Requirements for non-UN pressure receptacles designed, constructed and tested according to standards**

NOTE: Persons or bodies identified in standards as having responsibilities in accordance with RID shall meet the requirements of RID.

6.2.4.1 Design, construction and initial inspection and test

The standards referenced in the table below shall be applied for the issue of type approvals as indicated in column (4) to meet the requirements of Chapter 6.2 referred to in column (3). The requirements of Chapter 6.2 referred to in column (3) shall prevail in all cases. Column (5) gives the latest date when existing type approvals shall be withdrawn according to 1.8.7.2.4; if no date is shown the type approval remains valid until it expires.

Since 1 January 2009 the use of the referenced standards has been mandatory. Exceptions are dealt with in 6.2.5.

If more than one standard is referenced for the application of the same requirements, only one of them shall be applied, but in full unless otherwise specified in the table below.

Reference	Title of document	Applicable sub-sections and paragraphs	Applicable for new type approvals or for renewals	Latest date for withdrawal of existing type approvals
(1)	(2)	(3)	(4)	(5)
for design and construction				
Annex I, Parts 1 to 3 to 84/525/EEC	Council directive on the approximation of the laws of the Member States relating to seamless steel gas cylinders, published in the Official Journal of the European Communities No. L 300 from 19.11.1984.	6.2.3.1 and 6.2.3.4	Until further notice	
Annex I, Parts 1 to 3 to 84/526/EEC	Council directive on the approximation of the laws of the Member States relating to seamless, unalloyed aluminium and aluminium alloy gas cylinders, published in the Official Journal of the European Communities No. L 300 from 19.11.1984.	6.2.3.1 and 6.2.3.4	Until further notice	
Annex I, Parts 1 to 3 to 84/527/EEC	Council directive on the approximation of the laws of the Member States relating to welded unalloyed steel gas cylinders, published in the Official Journal of the European Communities No. L 300 from 19.11.1984.	6.2.3.1 and 6.2.3.4	Until further notice	
EN 1442:1998 + AC:1999	Transportable refillable welded steel cylinders for liquefied petroleum gas (LPG) – Design and construction	6.2.3.1 and 6.2.3.4	Between 1 July 2001 and 30 June 2007	31 December 2012
EN 1442:1998 + A2:2005	Transportable refillable welded steel cylinders for liquefied petroleum gas (LPG) – Design and construction	6.2.3.1 and 6.2.3.4	Between 1 January 2007 and 31 December 2010	
EN 1442:2006 + A1:2008	Transportable refillable welded steel cylinders for liquefied petroleum gas (LPG) – Design and construction	6.2.3.1 and 6.2.3.4	Until further notice	
EN 1800:1998 + AC:1999	Transportable gas cylinders - Acetylene cylinders – Basic requirements and definitions	6.2.1.1.9	Between 1 July 2001 and 31 December 2010	

Reference	Title of document	Applicable sub-sections and paragraphs	Applicable for new type approvals or for renewals	Latest date for withdrawal of existing type approvals
(1)	(2)	(3)	(4)	(5)
EN 1800:2006	Transportable gas cylinders – Acetylene cylinders – Basic requirements, definitions and type testing	6.2.1.1.9	Until further notice	
EN 1964-1:1999	Transportable gas cylinders – Specifications for the design and construction of refillable transportable seamless steel gas cylinders of capacity from 0.5 litres up to 150 litres – Part 1: Cylinders made of seamless steel with a Rm value of less than 1 100 MPa	6.2.3.1 and 6.2.3.4	Until further notice	
EN 1975:1999 (except Annex G)	Transportable gas cylinders – Specifications for the design and construction of refillable transportable seamless aluminium and aluminium alloy gas cylinders of capacity from 0.5 litres up to 150 litres	6.2.3.1 and 6.2.3.4	Before 1 July 2005	
EN 1975:1999 + A1:2003	Transportable gas cylinders – Specifications for the design and construction of refillable transportable seamless aluminium and aluminium alloy gas cylinders of capacity from 0.5 litres up to 150 litres	6.2.3.1 and 6.2.3.4	Until further notice	
EN ISO 11120:1999	Gas cylinders – Refillable seamless steel tubes for compressed gas transport of water capacity between 150 litres and 3 000 litres – Design, construction and testing	6.2.3.1 and 6.2.3.4	Until further notice	
EN 1964-3:2000	Transportable gas cylinders – Specifications for the design and construction of refillable transportable seamless steel gas cylinders of capacity from 0.5 litre up to 150 litres – Part 3: Cylinders made of seamless stainless steel with an Rm value of less than 1 100 MPa	6.2.3.1 and 6.2.3.4	Until further notice	
EN 12862:2000	Transportable gas cylinders – Specifications for the design and construction of refillable transportable welded aluminium alloy gas cylinders	6.2.3.1 and 6.2.3.4	Until further notice	
EN 1251-2:2000	Cryogenic vessels – Transportable, vacuum insulated, of not more than 1 000 litres volume – Part 2: Design, fabrication, inspection and testing	6.2.3.1 and 6.2.3.4	Until further notice	
EN 12257:2002	Transportable gas cylinders – Seamless, hoop wrapped composite cylinders	6.2.3.1 and 6.2.3.4	Until further notice	
EN 12807:2001 (except Annex A)	Transportable refillable brazed steel cylinders for liquefied petroleum gas (LPG) – Design and construction	6.2.3.1 and 6.2.3.4	Before 1 January 2013	[To be decided]
EN 12807:2008	Transportable refillable brazed steel cylinders for liquefied petroleum gas (LPG) – Design and construction	6.2.3.1 and 6.2.3.4	Until further notice	

Reference	Title of document	Applicable sub-sections and paragraphs	Applicable for new type approvals or for renewals	Latest date for withdrawal of existing type approvals
(1)	(2)	(3)	(4)	(5)
EN 1964-2:2001	Transportable gas cylinders – Specification for the design and construction of refillable transportable seamless steel gas cylinders of water capacities from 0.5 litre up to and including 150 litre – Part 2: Cylinders made of seamless steel with an Rm value of 1 100 MPa and above	6.2.3.1 and 6.2.3.4	Until further notice	
EN 13293:2002	Transportable gas cylinders – Specification for the design and construction of refillable transportable seamless normalised carbon manganese steel gas cylinders of water capacity up to 0.5 litre for compressed, liquefied and dissolved gases and up to 1 litre for carbon dioxide	6.2.3.1 and 6.2.3.4	Until further notice	
EN 13322-1:2003	Transportable gas cylinders – Refillable welded steel gas cylinders – Design and construction – Part 1: Welded steel	6.2.3.1 and 6.2.3.4	Before 1 July 2007	
EN 13322-1:2003 + A1:2006	Transportable gas cylinders – Refillable welded steel gas cylinders – Design and construction – Part 1: Welded steel	6.2.3.1 and 6.2.3.4	Until further notice	
EN 13322-2:2003	Transportable gas cylinders – Refillable welded stainless steel gas cylinders – Design and construction – Part 2: Welded stainless steel	6.2.3.1 and 6.2.3.4	Before 1 July 2007	
EN 13322-2:2003 + A1:2006	Transportable gas cylinders – Refillable welded stainless steel gas cylinders – Design and construction – Part 2: Welded stainless steel	6.2.3.1 and 6.2.3.4	Until further notice	
EN 12245:2002	Transportable gas cylinders – Fully wrapped composite cylinders	6.2.3.1 and 6.2.3.4	Until further notice	
EN 12205:2001	Transportable gas cylinders – Non refillable metallic gas cylinders	6.2.3.1 and 6.2.3.4	Until further notice	
EN 13110:2002	Transportable refillable welded aluminium cylinders for liquefied petroleum gas (LPG) – Design and construction	6.2.3.1 and 6.2.3.4	Until further notice	
EN 14427:2004	Transportable refillable fully wrapped composite cylinders for liquefied petroleum gases – Design and construction **NOTE:** This standard applies only to cylinders equipped with pressure relief valves.	6.2.3.1 and 6.2.3.4	Before 1 July 2007	

Reference	Title of document	Applicable sub-sections and paragraphs	Applicable for new type approvals or for renewals	Latest date for withdrawal of existing type approvals
(1)	(2)	(3)	(4)	(5)
EN 14427:2004 + A1:2005	Transportable refillable fully wrapped composite cylinders for liquefied petroleum gases – Design and construction **NOTE 1:** This standard applies only to cylinders equipped with pressure relief valves. **2:** In 5.2.9.2.1 and 5.2.9.3.1, both cylinders shall be subject to a burst test when they show damage equal to or worse than the rejection criteria.	6.2.3.1 and 6.2.3.4	Until further notice	
EN 14208:2004	Transportable gas cylinders – Specification for welded pressure drums up to 1000 litres capacity for the transport of gases – Design and construction	6.2.3.1 and 6.2.3.4	Until further notice	
EN 14140:2003	Transportable refillable welded steel cylinders for Liquefied Petroleum Gas (LPG) – Alternative design and construction	6.2.3.1 and 6.2.3.4	Between 1 January 2005 and 31 December 2010	
EN 14140:2003 + A1:2006	LPG equipment and accessories – Transportable refillable welded steel cylinders for LPG – Alternative design and construction	6.2.3.1 and 6.2.3.4	Until further notice	
EN 13769:2003	Transportable gas cylinders – Cylinder bundles – Design, manufacture, identification and testing	6.2.3.1 and 6.2.3.4	Before 1 July 2007	
EN 13769:2003 + A1:2005	Transportable gas cylinders – Cylinder bundles – Design, manufacture, identification and testing	6.2.3.1 and 6.2.3.4	Until further notice	
EN 14638-1:2006	Transportable gas cylinders – Refillable welded receptacles of a capacity not exceeding 150 litres – Part 1 Welded austenitic stainless steel cylinders made to a design justified by experimental methods	6.2.3.1 and 6.2.3.4	Until further notice	
EN 14893:2006 + AC:2007	LPG equipment and accessories – Transportable LPG welded steel pressure drums with a capacity between 150 and 1 000 litres	6.2.3.1 and 6.2.3.4	Until further notice	
for closures				
EN 849:1996 (except Annex A)	Transportable gas cylinders – Cylinder valves – Specification and type testing	6.2.3.1	Before 1 July 2003	
EN 849:1996/ A2:2001	Transportable gas cylinders – Cylinder valves: Specification and type testing	6.2.3.1	Before 1 July 2007	
EN ISO 10297:2006	Transportable gas cylinders – Cylinder valves – Specification and type testing	6.2.3.1	Until further notice	
EN 13152:2001	Specifications and testing of LPG – Cylinder valves – Self closing	6.2.3.3	Between 1 January 2005 and 31 December 2010	
EN 13152:2001 + A1:2003	Specifications and testing of LPG – Cylinder valves – Self closing	6.2.3.3	Until further notice	

Reference	Title of document	Applicable sub-sections and paragraphs	Applicable for new type approvals or for renewals	Latest date for withdrawal of existing type approvals
(1)	(2)	(3)	(4)	(5)
EN 13153:2001	Specifications and testing of LPG – Cylinder valves – Manually operated	6.2.3.3	Between 1 January 2005 and 31 December 2010	
EN 13153:2001 + A1:2003	Specifications and testing of LPG – Cylinder valves – Manually operated	6.2.3.3	Until further notice	

6.2.4.2 Periodic inspection and test

The standards referenced in the table below shall be applied for the periodic inspection and test of pressure receptacles as indicated in column (3) to meet the requirements of 6.2.3.5 which shall prevail in all cases.

The use of a referenced standard is mandatory.

When a pressure receptacle is constructed in accordance with the provisions of 6.2.5 the procedure for periodic inspection if specified in the type approval shall be followed.

If more than one standard is referenced for the application of the same requirements, only one of them shall be applied, but in full unless otherwise specified in the table below.

Reference	Title of document	Application authorized
(1)	(2)	(3)
for periodic inspection and test		
EN 1251-3:2000	Cryogenic vessels – Transportable, vacuum insulated, of not more than 1 000 litres volume – Part 3: Operational requirements	Until further notice
EN 1968:2002 + A1:2005 (except Annex B)	Transportable gas cylinders – Periodic inspection and testing of seamless steel gas cylinders	Until further notice
EN 1802:2002 (except Annex B)	Transportable gas cylinders – Periodic inspection and testing of seamless aluminium alloy gas cylinders	Until further notice
EN 12863:2002 + A1:2005	Transportable gas cylinders – Periodic inspection and maintenance of dissolved acetylene cylinders **NOTE:** In this standard "initial inspection" is to be understood as the "first periodic inspection" after final approval of a new acetylene cylinder.	Until further notice
EN 1803:2002 (except Annex B)	Transportable gas cylinders – Periodic inspection and testing of welded steel gas cylinders	Until further notice
EN ISO 11623:2002 (except clause 4)	Transportable gas cylinders – Periodic inspection and testing of composite gas cylinders	Until further notice
EN 14189:2003	Transportable gas cylinders – Inspection and maintenance of cylinder valves at time of periodic inspection of gas cylinders	Until further notice
EN 14876:2007	Transportable gas cylinders – Periodic inspection and testing of welded steel pressure drums	Until further notice
EN 14912:2005	LPG equipment and accessories – Inspection and maintenance of LPG cylinder valves at time of periodic inspection of cylinders	Until further notice

"

6.2.5 Amend to read as follows:

"**6.2.5 Requirements for non-UN pressure receptacles not designed, constructed and tested according to referenced standards**

To reflect scientific and technical progress or where no standard is referenced in 6.2.2 or 6.2.4, or to deal with specific aspects not addressed in a standard referenced in 6.2.2 or 6.2.4, the competent authority may recognize the use of a technical code providing the same level of safety.

In the type approval the issuing body shall specify the procedure for periodic inspections if the standards referenced in 6.2.2 or 6.2.4 are not applicable or shall not be applied.

The competent authority shall transmit to the secretariat of OTIF a list of the technical codes that it recognises. The list should include the following details: name and date of the code, purpose of the code and details of where it may be obtained. The secretariat shall make this information publicly available on its website.

A standard which has been adopted for reference in a future edition of the RID may be approved by the competent authority for use without notifying the secretariat of OTIF.

The requirements of 6.2.1, 6.2.3 and the following requirements however shall be met.

NOTE: For this section, the references to technical standards in 6.2.1 shall be considered as references to technical codes.

[6.2.5.1 to 6.2.5.6.3 unchanged.]"

6.2.6.3.3 Amend to read as follows:

"**6.2.6.3.3** With the approval of the competent authority, aerosols and receptacles, small, are not subject to 6.2.6.3.1 and 6.2.6.3.2, if they are required to be sterile but may be adversely affected by water bath testing, provided:

(a) They contain a non-flammable gas and either

(i) contain other substances that are constituent parts of pharmaceutical products for medical, veterinary or similar purposes;

(ii) contain other substances used in the production process for pharmaceutical products; or

(iii) are used in medical, veterinary or similar applications;

(b) An equivalent level of safety is achieved by the manufacturer's use of alternative methods for leak detection and pressure resistance, such as helium detection and water bathing a statistical sample of at least 1 in 2000 from each production batch; and

(c) For pharmaceutical products according to (a) (i) and (iii) above, they are manufactured under the authority of a national health administration. If required by the competent authority, the principles of Good Manufacturing Practice (GMP) established by the World Health Organization (WHO)[3] shall be followed.

___

[3] WHO Publication: "Quality assurance of pharmaceuticals. A compendium of guidelines and related materials. Volume 2: Good manufacturing practices and inspection"."

Chapter 6.3

6.3.4.2 (a) Amend the second sentence to read as follows:

"This symbol shall not be used for any purpose other than certifying that a packaging, a portable tank or a MEGC complies with the relevant requirements in Chapter 6.1, 6.2, 6.3, 6.5, 6.6 or 6.7;".

6.3.5.4.1 In the second sentence, insert after "not exceeding 6 mm":

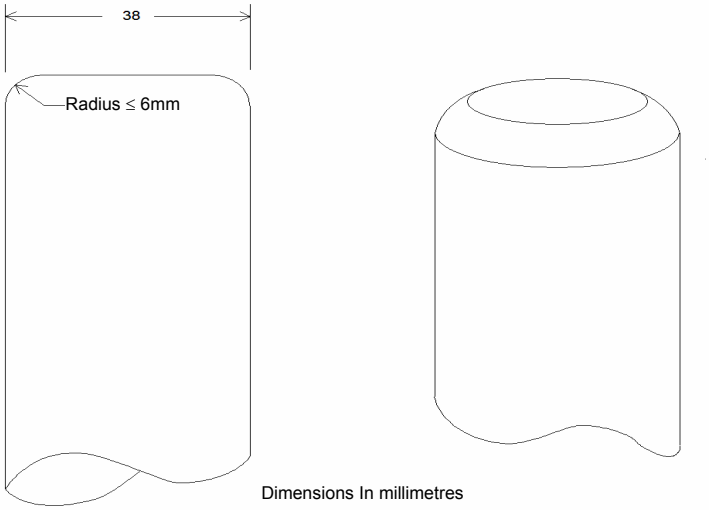
"(see Figure 6.3.5.4.2)".

6.3.5.4.2 In the third sentence, insert after "not exceeding 6 mm":

"(see Figure 6.3.5.4.2)".

At the end, insert the following new figure:

"**Figure 6.3.5.4.2**



Dimensions In millimetres

"

Chapter 6.4

6.4.2.9 Delete "otherwise".

6.4.5.4.3 (c) Replace "an increase of more than 20%" with:

"more than a 20% increase".

6.4.5.4.4 Replace "of a permanent enclosed character" with:

"with the characteristics of a permanent enclosure".

In sub-paragraph (c), insert after "Part 1: General Cargo Containers":

"and subsequent amendments 1:1993, 2:1998, 3:2005, 4:2006 and 5:2006,".

6.4.6.1 Replace "ISO 7195:1993 "Packaging of uranium hexafluoride (UF_6) for transport"" with:

"ISO 7195:2005 "Nuclear Energy – Packaging of uranium hexafluoride (UF_6) for transport"".

6.4.6.2 (a) Replace "ISO 7195:1993" with:

"ISO 7195:2005".

6.4.6.4 (a) Replace "ISO 7195:1993" with:

"ISO 7195:2005".

6.4.7.16 In sub-paragraph (b) (ii), replace "designed to ensure retention of the liquid contents" with:

"designed to enclose the liquid contents completely and ensure their retention".

6.4.11.5 Amend to read as follows:

"**6.4.11.5** The package, after being subjected to the tests specified in 6.4.15, shall:

(a) Preserve the minimum overall outside dimensions of the package to at least 10 cm; and

(b) Prevent the entry of a 10 cm cube."

6.4.11.7 In sub-paragraph (a), replace "each of which" with:

"not less than two of which".

[The second amendment in the French version does not apply to the English text.]

6.4.13 (c) Replace "6.4.11.12" with:

"6.4.11.13".

6.4.15.5 [The first amendment in the French version does not apply to the English version.]

Amend sub-paragraph (a) to read as follows:

"(a) A total weight equal to 5 times the maximum weight of the package; and".

6.4.22.6 (a) In the first sentence, insert after "package":

"design".

6.4.23.10 (a) [This amendment in the German version does not apply to the English text.]

6.4.23.11 (h),
6.4.23.12 (j),
6.4.23.13 (j) und
6.4.23.14 (l) [This amendment in the French version does not apply to the English version.]

6.4.23.12 (h) [This amendment in the French version does not apply to the English version.]

6.4.23.12 (j),
6.4.23.13 (j) and
6.4.23.14 (l) In the second sentence, replace "(for fissile material)" with:

"(for fissile material or for each fissile nuclide when appropriate)".

6.4.23.14 (g) [This amendment in the French version does not apply to the English version.]

6.4.23.14 (j) In the second sentence, replace "should" with:

"shall".

Chapter 6.5

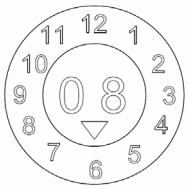
6.5.2.1.1 (a) Amend the second sentence to read as follows:

"This symbol shall not be used for any purpose other than certifying that a packaging, a portable tank or a MEGC complies with the relevant requirements in Chapter 6.1, 6.2, 6.3, 6.5, 6.6 or 6.7."

6.5.2.2.4 Amend to read as follows:

"**6.5.2.2.4** The inner receptacle of composite IBCs manufactured after 1 January 2011 shall bear the markings indicated in 6.5.2.1.1 (b), (c), (d) where this date is that of the manufacture of the plastics inner receptacle, (e) and (f). The UN packaging symbol shall not be applied. The marking shall be applied in the sequence shown in 6.5.2.1.1. It shall be durable, legible and placed in a location so as to be readily visible when the inner receptacle is placed in the outer casing.

The date of the manufacture of the plastics inner receptacle may alternatively be marked on the inner receptacle adjacent to the remainder of the marking. An example of an appropriate marking method is:



"

Add a new paragraph 6.5.2.4 to read as follows:

"**6.5.2.4 Marking of remanufactured composite IBCs (31HZ1)**

The marking specified in 6.5.2.1.1 and 6.5.2.2 shall be removed from the original IBC or made permanently illegible and new markings shall be applied to an IBC remanufactured in accordance with RID."

6.5.4.1 At the beginning, insert after "manufactured":

", remanufactured, repaired".

At the end, insert after "manufactured":

", remanufactured or repaired".

6.5.4.4.1 [This amendment in the German version does not apply to the English text.]

6.5.6.9.5 At the end of sub-paragraph (d), add the following new note:

"**NOTE:** The criteria in (d) apply to design types for IBCs manufactured as from 1 January 2011."

6.5.6.13.3.1 [This amendment in the German version does not apply to the English text.]

Chapter 6.6

6.6.1.2 Replace "and tested" with:

", tested and remanufactured".

Insert after "each manufactured":

"or remanufactured large".

6.6.3.1 (a) Amend the second sentence to read as follows:

"This symbol shall not be used for any purpose other than certifying that a packaging, a portable tank or a MEGC complies with the relevant requirements in Chapter 6.1, 6.2, 6.3, 6.5, 6.6 or 6.7."

6.6.5.2.2 Amend to read as follows:

"**6.6.5.2.2** In the drop tests for liquids, when another substance is used, it shall be of similar relative density and viscosity to those of the substance being carried. Water may also be used for the liquid drop test under the conditions in 6.6.5.3.4.4."

6.6.5.3.4.4 Amend to read as follows:

"**6.6.5.3.4.4** Drop height

NOTE: Large packagings for substances and articles of Class 1 shall be tested at the packing group II performance level.

6.6.5.3.4.4.1 For inner packagings containing solid or liquid substances or articles, if the test is performed with the solid, liquid or articles to be carried, or with another substance or article having essentially the same characteristics:

Packing group I	Packing group II	Packing group III
1.8 m	1.2 m	0.8 m

6.6.5.3.4.4.2 For inner packagings containing liquids if the test is performed with water:

(a) Where the substances to be carried have a relative density not exceeding 1.2:

Packing group I	Packing group II	Packing group III
1.8 m	1.2 m	0.8 m

(b) Where the substances to be carried have a relative density exceeding 1.2, the drop height shall be calculated on the basis of the relative density (d) of the substance to be carried, rounded up to the first decimal, as follows:

Packing group I	Packing group II	Packing group III
d × 1.5 (m)	d × 1.0 (m)	d × 0.67 (m)

"

Chapter 6.7

6.7.2.6.2 (a) Amend to read as follows:

"(a) An external stop-valve, fitted as close to the shell as reasonably practicable, and so designed as to prevent any unintended opening through impact or other inadvertent act; and".

6.7.2.8.4 At the end, add the following sentence:

"In addition, fusible elements conforming to 6.7.2.10.1 may also be used."

6.7.2.10.1 In the first sentence, replace "110 °C" with:

"100 °C".

In the second sentence, replace "in no case shall they" with:

"when used for transport safety purposes, they shall not".

In the third sentence, replace "utilized" with:

"used".

At the end of the third sentence, add:

"unless specified by special provision TP 36 in Column (11) of Table A of Chapter 3.2."

6.7.2.17.4 [This amendment in the German version does not apply to the English text.]

6.7.2.20.1 Amend to read as follows:

"**6.7.2.20.1** Every portable tank shall be fitted with a corrosion resistant metal plate permanently attached to the portable tank in a conspicuous place readily accessible for inspection. When for reasons of portable tank arrangements the plate cannot be permanently attached to the shell, the shell shall be marked with at least the information required by the pressure vessel code. As a minimum, at least the following information shall be marked on the plate by stamping or by any other similar method:

(a) Owner information

(i) Owner's registration number;

(b) Manufacturing information

(i) Country of manufacture;

(ii) Year of manufacture;

(iii) Manufacturer's name or mark;

(iv) Manufacturer's serial number;

(c) Approval information

(i) The United Nations packaging symbol 

;
This symbol shall not be used for any purpose other than certifying that a packaging, a portable tank or a MEGC complies with the relevant requirements in Chapter 6.1, 6.2, 6.3, 6.5, 6.6 or 6.7;

(ii) Approval country;

(iii) Authorized body for the design approval;

(iv) Design approval number;

(v) Letters "AA", if the design was approved under alternative arrangements (see 6.7.1.2);

(vi) Pressure vessel code to which the shell is designed;

(d) Pressures

(i) MAWP (in bar gauge or kPa gauge)[2];

(ii) Test pressure (in bar gauge or kPa gauge)[2];

(iii) Initial pressure test date (month and year);

(iv) Identification mark of the initial pressure test witness;

(v) External design pressure[3] (in bar gauge or kPa gauge)[2];

(vi) MAWP for heating/cooling system (in bar gauge or kPa gauge)[2] (when applicable);

(e) Temperatures

(i) Design temperature range (in °C)[2];

(f) Materials

(i) Shell material(s) and material standard reference(s);

(ii) Equivalent thickness in reference steel (in mm)[2];

(iii) Lining material (when applicable);

(g) Capacity

(i) Tank water capacity at 20 °C (in litres)[2];
This indication is to be followed by the symbol "S" when the shell is divided by surge plates into sections of not more than 7 500 litres capacity;

(ii) Water capacity of each compartment at 20 °C (in litres)[2] (when applicable, for multi-compartment tanks).
This indication is to be followed by the symbol "S" when the compartment is divided by surge plates into sections of not more than 7 500 litres capacity;

(h) Periodic inspections and tests

(i) Type of the most recent periodic test (2.5-year, 5-year or exceptional);

(ii) Date of the most recent periodic test (month and year);

(iii) Test pressure (in bar gauge or kPa gauge)[2] of the most recent periodic test (if applicable);

(iv) Identification mark of the authorized body who performed or witnessed the most recent test.

[2] The unit used shall be indicated
[3] See 6.7.2.2.10.

Figure 6.7.2.20.1: Example of identification plate marking

Owner's registration number				
MANUFACTURING INFORMATION				
Country of manufacture				
Year of manufacture				
Manufacturer				
Manufacturer's serial number				
APPROVAL INFORMATION				
u n	Approval country			
	Authorized body for design approval			
	Design approval number			"AA" *(if applicable)*
Shell design code (pressure vessel code)				
PRESSURES				
MAWP				bar *or* kPa
Test pressure				bar *or* kPa
Initial pressure test date:	*(mm/yyyy)*	Witness stamp:		
External design pressure				bar *or* kPa
MAWP for heating/cooling system (*when applicable)*				bar *or* kPa
TEMPERATURES				
Design temperature range			°C to	°C
MATERIALS				
Shell material(s) and material standard reference(s)				
Equivalent thickness in reference steel				mm
Lining material *(when applicable)*				
CAPACITY				
Tank water capacity at 20 °C			litres	"S" *(if applicable)*
Water capacity of compartment ___ at 20 °C *(when applicable, for multi-compartment tanks)*			litres	"S" *(if applicable)*
PERIODIC INSPECTIONS / TESTS				

Test type	Test date	Witness stamp and test pressure[a]		Test type	Test date	Witness stamp and test pressure[a]	
	(mm/yyyy)		bar *or* kPa		*(mm/yyyy)*		bar *or* kPa

[a] Test pressure if applicable."

6.7.2.20.2 Insert in the list:

"Portable tank instruction in accordance with 4.2.5.2.6".

6.7.3.13.4 [This amendment in the German version does not apply to the English text.]

6.7.3.16.1 Amend to read as follows:

"**6.7.3.16.1** Every portable tank shall be fitted with a corrosion resistant metal plate permanently attached to the portable tank in a conspicuous place readily accessible for inspection. When for reasons of portable tank arrangements the plate cannot be permanently attached to the shell, the shell shall be marked with at least the information required by the pressure vessel code. As a minimum, at least the following information shall be marked on the plate by stamping or by any other similar method:

(a) Owner information

(i) Owner's registration number;

(b) Manufacturing information

(i) Country of manufacture;

(ii) Year of manufacture;

(iii) Manufacturer's name or mark;

(iv) Manufacturer's serial number;

(c) Approval information

(i) The United Nations packaging symbol 

;
This symbol shall not be used for any purpose other than certifying that a packaging, a portable tank or a MEGC complies with the relevant requirements in Chapter 6.1, 6.2, 6.3, 6.5, 6.6 or 6.7;

(ii) Approval country;

(iii) Authorized body for the design approval;

(iv) Design approval number;

(v) Letters "AA", if the design was approved under alternative arrangements (see 6.7.1.2);

(vi) Pressure vessel code to which the shell is designed;

(d) Pressures

(i) MAWP (in bar gauge or kPa gauge)[6];

(ii) Test pressure (in bar gauge or kPa gauge)[6];

(iii) Initial pressure test date (month and year);

(iv) Identification mark of the initial pressure test witness;

(v) External design pressure[7] (in bar gauge or kPa gauge)[6];

(e) Temperatures

(i) Design temperature range (in °C)[6];

(ii) Design reference temperature (in °C)[6];

(f) Materials

(i) Shell material(s) and material standard reference(s);

(ii) Equivalent thickness in reference steel (in mm)[6];

(g) Capacity

(i) Tank water capacity at 20 °C (in litres)[6];

(h) Periodic inspections and tests

(i) Type of the most recent periodic test (2.5-year, 5-year or exceptional);

(ii) date of the most recent periodic test (month and year);

(iii) Test pressure (in bar gauge or kPa gauge)[6] of the most recent periodic test (if applicable);

(iv) Identification mark of the authorized body who performed or witnessed the most recent test.

[6] The unit used shall be indicated.
[7] See 6.7.3.2.8.

Figure 6.7.3.16.1: Example of identification plate marking

Owner's registration number		
MANUFACTURING INFORMATION		
Country of manufacture		
Year of manufacture		
Manufacturer		
Manufacturer's serial number		
APPROVAL INFORMATION		
u	Approval country	

	Authorized body for design approval		
	Design approval number		"AA" *(if applicable)*
Shell design code (pressure vessel code)			
PRESSURES			
MAWP			bar *or* kPa
Test pressure			bar *or* kPa
Initial pressure test date:	*(mm/yyyy)*	Witness stamp:	
External design pressure			bar *or* kPa
TEMPERATURES			
Design temperature range			°C to °C
Design reference temperature			°C
MATERIALS			
Shell material(s) and material standard reference(s)			
Equivalent thickness in reference steel			mm
CAPACITY			
Tank water capacity at 20 °C			litres

PERIODIC INSPECTIONS / TESTS							
Test type	Test date	Witness stamp and test pressure[a]		Test type	Test date	Witness stamp and test pressure[a]	
	(mm/yyyy)		bar *or* kPa		*(mm/yyyy)*		bar *or* kPa

[a] Test pressure if applicable."

6.7.3.16.2 Insert in the list:

"Portable tank instruction in accordance with 4.2.5.2.6".

6.7.4.12.4 [This amendment in the German version does not apply to English text.]

6.7.4.15.1 Amend to read as follows:

"**6.7.4.15.1** Every portable tank shall be fitted with a corrosion resistant metal plate permanently attached to the portable tank in a conspicuous place readily accessible for inspection. When for reasons of portable tank arrangements the plate cannot be permanently attached to the shell, the shell shall be marked with at least the information required by the pressure vessel code. As a minimum, at least the following information shall be marked on the plate by stamping or by any other similar method:

(a) Owner information

(i) Owner's registration number;

(b) Manufacturing information

(i) Country of manufacture;

(ii) Year of manufacture;

(iii) Manufacturer's name or mark;

(iv) Manufacturer's serial number;

(c) Approval information

(i) The United Nations packaging symbol 

;
This symbol shall not be used for any purpose other than certifying that a packaging, a portable tank or a MEGC complies with the relevant requirements in Chapter 6.1, 6.2, 6.3, 6.5, 6.6 or 6.7;

(ii) Approval country;

(iii) Authorized body for the design approval;

(iv) Design approval number;

(v) Letters "AA", if the design was approved under alternative arrangements (see 6.7.1.2);

(vi) Pressure vessel code to which the shell is designed;

(d) Pressures

(i) MAWP (in bar gauge or kPa gauge)[10]

(ii) Test pressure (in bar gauge or kPa gauge)[10];

(iii) Initial pressure test date (month and year);

(iv) Identification mark of the initial pressure test witness;

(e) Temperatures

(i) Minimum design temperature (in °C)[10];

(f) Materials

(i) Shell material(s) and material standard reference(s);

(ii) Equivalent thickness in reference steel (in mm)[10];

(g) Capacity

(i) Tank water capacity at 20 °C (in litres)[10];

(h) Insulation

(i) Either "Thermally insulated" or "Vacuum insulated" (as applicable);

(ii) Effectiveness of the insulation system (heat influx) (in Watts)[10];

(i) Holding times – for each refrigerated liquefied gas permitted to be carried in the portable tank:

(i) Name, in full, of the refrigerated liquefied gas;

(ii) Reference holding time (in days or hours)[10];

(iii) Initial pressure (in bar gauge or kPa gauge)[10];

(iv) Degree of filling (in kg)[10];

(j) Periodic inspections and tests

(i) Type of the most recent periodic test (2.5-year, 5-year or exceptional);

(ii) Date of the most recent periodic test (month and year);

(iii) Identification mark of the authorized body who performed or witnessed the most recent test.

[10] The unit used shall be indicated.

Figure 6.7.4.15.1: Example of identification plate marking

Owner's registration number				
MANUFACTURING INFORMATION				
Country of manufacture				
Year of manufacture				
Manufacturer				
Manufacturer's serial number				
APPROVAL INFORMATION				
u n	Approval country			
	Authorized body for design approval			
	Design approval number			"AA" *(if applicable)*
Shell design code (pressure vessel code)				
PRESSURES				
MAWP				bar *or* kPa
Test pressure				bar *or* kPa
Initial pressure test date:	*(mm/yyyy)*	Witness stamp:		
TEMPERATURES				
Minimum design temperature				°C
MATERIALS				
Shell material(s) and material standard reference(s)				
Equivalent thickness in reference steel				mm
CAPACITY				
Tank water capacity at 20 °C				litres
INSULATION				
"Thermally insulated" or "Vacuum insulated" *(as applicable)*				
Heat influx				Watts
HOLDING TIMES				

Refrigerated liquefied gas(es) permitted	Reference holding time	Initial pressure	Degree of filling
	days *or* hours	bar *or* kPa	kg

PERIODIC INSPECTIONS / TESTS					
Test type	Test date	Witness stamp	Test type	Test date	Witness stamp
	(mm/yyyy)			*(mm/yyyy)*	

"

6.7.4.15.2 Insert in the list:

"Portable tank instruction in accordance with 4.2.5.2.6".

6.7.5.4.1 Amend the last sentence to read as follows:

"If so required by the competent authority of the country of use, MEGCs for other gases shall be fitted with pressure relief devices as specified by that competent authority."

6.7.5.13.1 Amend to read as follows:

"**6.7.5.13.1** Every MEGC shall be fitted with a corrosion resistant metal plate permanently attached to the MEGC in a conspicuous place readily accessible for inspection. The metal plate shall not be affixed to the elements. The elements shall be marked in accordance with Chapter 6.2. As a minimum, at least the following information shall be marked on the plate by stamping or by any other similar method:

(a) Owner information

(i) Owner's registration number;

(b) Manufacturing information

(i) Country of manufacture;

(ii) Year of manufacture;

(iii) Manufacturer's name or mark;

(iv) Manufacturer's serial number;

(c) Approval information

(i) The United Nations packaging symbol 

;
This symbol shall not be used for any purpose other than certifying that a packaging, a portable tank or a MEGC complies with the relevant requirements in Chapter 6.1, 6.2, 6.3, 6.5, 6.6 or 6.7;

(ii) Approval country;

(iii) Authorized body for the design approval;

(iv) Design approval number;

(v) Letters "AA", if the design was approved under alternative arrangements (see 6.7.1.2);

(d) Pressures

(i) Test pressure (in bar gauge)[12];

(ii) Initial pressure test date (month and year);

(iii) Identification mark of the initial pressure test witness;

(e) Temperatures

(i) Design temperature range (in °C)[12];

(f) Elements / Capacity

(i) Number of elements;

(ii) Total water capacity (in litres)[12];

(g) Periodic inspections and tests

(i) Type of the most recent periodic test (5-year or exceptional);

(ii) Date of the most recent periodic test (month and year);

(iii) Identification mark of the authorized body who performed or witnessed the most recent test.

[12] The unit used shall be indicated.

Figure 6.7.5.13.1: Example of identification plate marking

Owner's registration number				
MANUFACTURING INFORMATION				
Country of manufacture				
Year of manufacture				
Manufacturer				
Manufacturer's serial number				
APPROVAL INFORMATION				
u n	Approval country			
	Authorized body for design approval			
	Design approval number			"AA" *(if applicable)*
PRESSURES				
Test pressure				bar
Initial pressure test date:	*(mm/yyyy)*	Witness stamp:		
TEMPERATURES				
Design temperature range		°C to		°C

ELEMENTS / CAPACITY					
Number of elements					
Total water capacity					litres
PERIODIC INSPECTIONS / TESTS					
Test type	Test date	Witness stamp	Test type	Test date	Witness stamp
	(mm/yyyy)			*(mm/yyyy)*	

"

Chapter 6.8

[6.8.2.1.2 At the end, add a reference to the following footnote:

"* These requirements shall be deemed to be met if the competent body in accordance with the technical specification for interoperability (TSI) relating to the subsystem "rolling stock – freight wagons" of the trans-European conventional rail system (Commission decision 2006/861/EC of 28 July 2006, published in the Official Journal L 344, 8 December 2006) has carried out this assessment in the framework of the EC conformity assessment of the wagon."**]**

6.8.2.1.18 At the end of footnote 2, add the following sentence:

""Mild steel" in this case also covers a steel referred to in EN material standards as "mild steel", with a minimum tensile strength between 360 N/mm^2 and 490 N/mm^2 and a minimum elongation at fracture conforming to 6.8.2.1.12."

Insert a new 6.8.2.1.29 as follows:

"**6.8.2.1.29** The minimum distance between the headstock plane and the most protruding point at the shell extremity on tank-wagons shall be 300 mm.

Alternatively for tank-wagons for substances other than those for which the requirements of special provision TE 25 of 6.8.4 (b) apply, buffer override protection of a design approved by the competent authority shall be provided. This alternative is only applicable to tank-wagons used solely on railway infrastructure requiring a freight vehicle gauge smaller than G1[5].

[5] The G1 gauge is referenced in the technical specification for interoperability (TSI) relating to the subsystem "rolling stock – freight wagons" of the trans-European conventional rail system (Commission decision 2006/861/EC of 28 July 2006, published in the Official Journal L 344, 8 December 2006)."

Footnotes 5 to 19 become 6 to 20.

6.8.2.2.3 Amend the second paragraph to read as follows:

"Vacuum valves
and self-operating ventilation valves
and venting systems (see 6.8.2.2.6) used on tanks intended for the carriage of substances meeting the flash-point criteria of Class 3, shall prevent the immediate passage of flame into the tank by means of a suitable device to prevent the propagation of a flame, or the shell of the tank shall be capable of withstanding, without leakage, an explosion resulting from the passage of the flame."

Insert the following new last paragraph:

"If the protection consists of a suitable flame trap or flame arrester, it shall be positioned as close as possible to the shell or the shell compartment. For multi-compartment tanks, each compartment shall be protected separately."

Add a new 6.8.2.3.3 to read as follows:

"**6.8.2.3.3** The following requirements apply to tanks for which special provision TA 4 of 6.8.4 (and therefore 1.8.7.2.4) does not apply.

The type approval shall be valid for a maximum of ten years. If within that period the relevant technical requirements of RID (including referenced standards) have changed so that the approved type is no longer in conformity with them, the competent authority or the body designated by that authority which issued the type approval shall withdraw it and inform the holder of the type approval.

NOTE: For the ultimate dates for withdrawal of existing type approvals, see column (5) of the tables in 6.8.2.6 or 6.8.3.6 as appropriate.

If a type approval has expired or has been withdrawn, the manufacture of the tanks, battery-wagons or MEGCs according to that type approval is no longer authorised.

In such a case, the relevant provisions concerning the use and periodic inspection of tanks, battery-wagons or MEGCs contained in the type approval which has expired or has been withdrawn shall continue to apply to these tanks, battery-wagons or MEGCs constructed before the expiry or the withdrawal if they may continue to be used.

They may continue to be used as long as they remain in conformity with the requirements of RID. If they are no longer in conformity with the requirements of RID they may continue to be used only if such use is permitted by relevant transitional measures in Chapter 1.6.

Type approvals may be renewed by a complete review and assessment for conformity with the provisions of RID applicable at the date of renewal. Renewal is not permitted after a type approval has been withdrawn. Interim amendments of an existing type approval not affecting conformity (see 6.8.2.3.2) do not extend or modify the original validity of the certificate.

NOTE: The review and assessment of conformity can be done by a body other than the one which issued the original type approval.

The issuing body shall keep all documents for the type approval for the whole period of validity including its renewals if granted.

If the designation of the issuing body is revoked or restricted, or when the body has ceased activity, the competent authority shall take appropriate steps to ensure that the files are either processed by another body or kept available."

6.8.2.5.1 Amend the seventh indent to read as follows:

"– capacity of the shell[13] – in the case of multiple-compartment shells, the capacity of each compartment[13] –,

followed by the symbol "S" when the shells or the compartments of more than 7 500 litres are divided by surge plates into sections of not more than 7 500 litres capacity;".

6.8.2.6 Amend to read as follows:

"**6.8.2.6 Requirements for tanks which are designed, constructed and tested according to standards**

NOTE: Persons or bodies identified in standards as having responsibilities in accordance with RID shall meet the requirements of RID.

6.8.2.6.1 Design and construction

The standards referenced in the table below shall be applied for the issue of type approvals as indicated in column (4) to meet the requirements of Chapter 6.8 referred to in column (3). The requirements of Chapter 6.8 referred to in column (3) shall prevail in all cases. Column (5) gives the latest date when existing type approvals shall be withdrawn according to 1.8.7.2.4 or 6.8.2.3.3; if no date is shown the type approval remains valid until it expires.

Since 1 January 2009 the use of the referenced standards has been mandatory. Exceptions are dealt with in 6.8.2.7 and 6.8.3.7.

If more than one standard is referenced for the application of the same requirements, only one of them shall be applied, but in full unless otherwise specified in the table below.

Reference	Title of document	Applicable sub-sections and paragraphs	Applicable for new type approvals or for renewals	Latest date for withdrawal of existing type approvals
(1)	(2)	(3)	(4)	(5)
For all tanks				
EN 14025:2003 + AC:2005	Tanks for the transport of dangerous goods – Metallic pressure tanks – Design and construction	6.8.2.1	Between 1 January 2005 and 30 June 2009	
EN 14025:2008	Tanks for the transport of dangerous goods – Metallic pressure tanks – Design and construction	6.8.2.1 and 6.8.3.1	Until further notice	
EN 14432:2006	Tanks for the transport of dangerous goods – Tank equipment for the transport of liquid chemicals – Product discharge and air inlet valves	6.8.2.2.1	Until further notice	

Reference	Title of document	Applicable sub-sections and paragraphs	Applicable for new type approvals or for renewals	Latest date for withdrawal of existing type approvals
(1)	(2)	(3)	(4)	(5)
EN 14433:2006	Tanks for the transport of dangerous goods – Tank equipment for the transport of liquid chemicals – Foot valves	6.8.2.2.1	Until further notice	
For tanks with a maximum working pressure not exceeding 50 kPa and intended for the carriage of substances for which a tank code with the letter "G" is given in column (12) of Table A of Chapter 3.2				
EN 13094:2004	Tanks for the transport of dangerous goods – Metallic tanks with a working pressure not exceeding 0.5 bar – Design and construction	6.8.2.1	Between 1 January 2005 and 31 December 2009	
EN 13094:2008 + AC:2008	Tanks for the transport of dangerous goods – Metallic tanks with a working pressure not exceeding 0.5 bar – Design and construction	6.8.2.1	Until further notice	
For tanks intended for the carriage of liquid petroleum products and other dangerous substances of Class 3 which have a vapour pressure not exceeding 110 kPa at 50 °C and petrol, and which have no toxic or corrosive subsidiary hazard				
EN 13094:2004	Tanks for the transport of dangerous goods – Metallic tanks with a working pressure not exceeding 0.5 bar – Design and construction	6.8.2.1	Between 1 January 2005 and 31 December 2009	
EN 13094:2008 + AC 2008	Tanks for the transport of dangerous goods – Metallic tanks with a working pressure not exceeding 0.5 bar – Design and construction	6.8.2.1	Until further notice	

6.8.2.6.2 Inspection and test

The standard referenced in the table below shall be applied for the inspection and test of tanks as indicated in column (4) to meet the requirements of Chapter 6.8 referred to in column (3) which shall prevail in all cases.

The use of a referenced standard is mandatory.

Reference	Title of document	Applicable sub-sections and paragraphs	Application authorized
(1)	(2)	(3)	(4)
EN 12972:2007	Tanks for transport of dangerous goods – Testing, inspection and marking of metallic tanks	6.8.2.4 6.8.3.4	Until further notice

"

6.8.2.7 Amend to read as follows:

"**6.8.2.7 Requirements for tanks which are not designed, constructed and tested according to referenced standards**

To reflect scientific and technical progress or where no standard is referenced in 6.8.2.6 or to deal with specific aspects not addressed in a standard referenced in 6.8.2.6, the competent authority may recognize the use of a technical code providing the same level of safety. Tanks shall, however, comply with the minimum requirements of 6.8.2.

The competent authority shall transmit to the secretariat of OTIF a list of the technical codes that it recognises. The list should include the following details: name and

date of the code, purpose of the code and details of where it may be obtained. The secretariat shall make this information publicly available on its website.

A standard which has been adopted for reference in a future edition of the RID may be approved by the competent authority for use without notifying the OTIF secretariat.

For testing, inspection and marking, the applicable standard as referenced in 6.8.2.6 may also be used."

6.8.3.2.3 Amend the first two sentences to read as follows:

"**6.8.3.2.3** The internal stop-valve of all filling and all discharge openings of tanks | with a capacity greater than 1 m^3 intended for the carriage of liquefied flammable and/or toxic gases shall be instant-closing and shall close automatically in the event of an unintended movement of the tank or in the event of fire. It shall also be possible to operate the internal stop-valve by remote control."

6.8.3.6 Amend to read as follows:

"**6.8.3.6 Requirements for battery-wagons and MEGCs which are designed, constructed and tested according to referenced standards**

(Reserved)".

6.8.3.7 Amend to read as follows:

"**6.8.3.7 Requirements for battery-wagons and MEGCs which are not designed, constructed and tested according to referenced standards**

To reflect scientific and technical progress or where no standard is referenced in 6.8.3.6 or to deal with specific aspects not addressed in a standard referenced in 6.8.3.6, the competent authority may recognize the use of a technical code providing the same level of safety. Battery-wagons and MEGCs shall, however, comply with the minimum requirements of 6.8.3.

In the type approval the issuing body shall specify the procedure for periodic inspections if the standards referenced in 6.2.2, 6.2.4 or 6.8.2.6 are not applicable or shall not be applied.

The competent authority shall transmit to the secretariat of OTIF a list of the technical codes that it recognises. The list should include the following details: name and date of the code, purpose of the code and details of where it may be obtained. The secretariat shall make this information publicly available on its website.

A standard which has been adopted for reference in a future edition of the RID may be approved by the competent authority for use without notifying the OTIF secretariat."

6.8.4 (a)

TC 2 [This amendment in the German version does not apply to the English text.]

TC 6 [This amendment in the German version does not apply to the English text.]

[6.8.4 (b) Insert the following new special provision TE xx (left-hand column only):

"**TE xx**	Tank-wagons for substances carried in the liquid state and gases, and battery-wagons shall be equipped with a derailment detection device. This device shall provide an immediate and clear signal to the locomotive driver that a derailment has occurred. Venting of the main brake pipe shall be considered as a clear signal. The requirements shall be considered to have been fulfilled if the device is approved in accordance with UIC leaflet 541-08 (version applicable as at June 2007, 4th edition)."**]**

6.8.4 (c)

TA 4 Replace "1.8.6.4" with:

"1.8.6.2, 1.8.6.4, 1.8.6.5 and 1.8.6.8".

6.8.4 (d)

TT 8 In the first paragraph, replace "approved for the carriage of UN 1005 AMMONIA, ANHYDROUS" with:

"on which the proper shipping name required for the entry UN 1005 AMMONIA, ANHYDROUS is marked in accordance with 6.8.3.5.1 to 6.8.3.5.3".

Add the following new third paragraph:

"If the marking of the substance on the tank and/or tank plate is removed, a magnetic particle inspection shall be carried out and these actions recorded in the inspection certificate attached to the tank record."

TT 9 Replace "1.8.6.4" with:

"1.8.6.2, 1.8.6.4, 1.8.6.5 and 1.8.6.8".

PART 7

Chapter 7.2

7.2.4

W 12 After "31HZ2", insert:

"(31HA2, 31HB2, 31HN2, 31HD2 und 31HH2)".

Chapter 7.5

7.5 [This amendment in the German version does not apply to the English text.]

7.5.2.1 At the end of note d to the table, add the following two sentences:

"Alkali metal nitrates include caesium nitrate (UN 1451), lithium nitrate (UN 2722), potassium nitrate (UN 1486), rubidium nitrate (UN 1477) and sodium nitrate (UN 1498). Alkaline earth metal nitrates include barium nitrate (UN 1446), beryllium nitrate (UN 2464), calcium nitrate (UN 1454), magnesium nitrate (UN 1474) and strontium nitrate (UN 1507)."

Requirements for the testing of plastics receptacles

3.3.2 [This amendment in the German version does not apply to the English text.]