



# Economic and Social Council

Distr.: General  
15 November 2021  
English  
Original: English and French

---

## Economic Commission for Europe

### Inland Transport Committee

#### Working Party on the Transport of Dangerous Goods

**Joint Meeting of Experts on the Regulations annexed to the European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (ADN) (ADN Safety Committee)**

**Thirty-ninth session**

Geneva, 24-28 January 2022

Item 5 (a) of the provisional agenda

**Proposals for amendments to the Regulations annexed to ADN: work of the RID/ADR/ADN Joint Meeting**

## **Consolidated list of amendments relevant for ADN adopted by the Joint RID/ADR/ADN Meeting and by the Working Party on the Transport of Dangerous Goods (WP.15) for entry into force on 1 January 2023**

### **Note by the secretariat<sup>\*,\*\*</sup>**

1. The secretariat reproduces hereafter the draft amendments relevant to ADN adopted by the Joint Meeting at its Autumn 2020 session and Spring and Autumn 2021 sessions and the amendments relevant to ADN adopted by the Working Party on the Transport of Dangerous Goods (WP.15) during the biennium.

2. The amendments adopted by the Joint Meeting at its Autumn 2020 session and at its Spring and Autumn 2021 sessions can be found in documents ECE/TRANS/WP.15/AC.1/158, annex II; ECE/TRANS/WP.15/AC.1/160, annex II; ECE/TRANS/WP.15/AC.1/162, annex II and ECE/TRANS/WP.15/AC.1/2021/24/Add.1.

Text in black corresponds to draft amendments relevant for ADN adopted by the Working Party on the Transport of Dangerous Goods (WP.15) and the Joint RID/ADR/ADN meeting in 2020 and 2021 for entry into force on 1 January 2023.

---

\* Distributed in German by the Central Commission for the Navigation of the Rhine under the symbol CCNR-ZKR/ADN/WP.15/AC.2/2022/20.

\*\* In accordance with the programme of work of the Inland Transport Committee for 2021 as outlined in proposed programme budget for 2021 (A/75/6 (Sect.20) para 20.51).



Text in blue corresponds to draft amendments to ADN proposed by the Ad Hoc Working Group on the Harmonization of RID/ADR/ADN with the United Nations Recommendations on the Transport of Dangerous Goods and modified by the Joint Meeting of the RID Committee of Experts and the Working Party on the Transport of Dangerous Goods.

## Chapter 1.1

1.1.4 Insert the following new 1.1.4.7:

**“1.1.4.7 *Refillable pressure receptacles authorized by the United States of America Department of Transportation***

**“NOTE: For carriage in accordance with 1.1.4.7, see also 5.4.1.1.24.”**

1.1.4.7.1 *Import of gases*

Refillable pressure receptacles authorised by the United States of America Department of Transportation and constructed and tested in accordance with standards listed in Part 178, Specifications for Packagings of Title 49, Transportation, of the Code of Federal Regulations accepted for carriage in a transport chain in accordance with 1.1.4.2 may be carried from the location of the temporary storage at the end point of the transport chain to the end user.

1.1.4.7.2 *Export of gases and empty uncleaned pressure receptacles*

Refillable pressure receptacles authorised by the United States of America Department of Transportation and constructed in accordance with standards listed in Part 178, Specifications for Packagings of Title 49, Transportation, of the Code of Federal Regulations may be filled and carried only for the purpose of exporting to countries which are not Contracting Parties to ADN provided the following provisions are met:

- (a) The filling of the pressure receptacle is in accordance with the relevant requirements of the Code of Federal Regulations of the United States of America;
- (b) The pressure receptacles shall be marked and labelled in accordance with Chapter 5.2;
- (c) The provisions of 4.1.6.12 and 4.1.6.13 of ADR shall apply to pressure receptacles. Pressure receptacles shall not be filled after they become due for periodic inspection but may be carried after the expiry of the time-limit for purposes of performing inspection, including the intermediate carriage operations.

(Reference document: ECE/TRANS/WP.15/253 and ECE/TRANS/WP.15/AC.1/162)

1.1.5 Add the following Note:

**“NOTE: A standard provides details on how to meet the provisions of ADN and may include requirements in addition to those set out in ADN.”**

(Reference document: ECE/TRANS/WP.15/253)

## Chapter 1.2

- 1.2 Amend the title to read “**DEFINITIONS, UNITS OF MEASUREMENT AND ABBREVIATIONS**”.

(Reference documents: ECE/TRANS/WP.15/AC.1/160, Annex II and informal document INF.11)

- 1.2.1 The amendment to the definition of “Filler” does not apply to the English version.

(Reference document: ECE/TRANS/WP.15/AC.1/162)

- 1.2.1 In the definition for “*Bundle of cylinders*” replace “an assembly of cylinders” by “a pressure receptacle comprising an assembly of cylinders or cylinder shells”.

Add the following new note under the definition of “*Closure*”:

“**NOTE:** For pressure receptacles, closures are, for example, valves, pressure relief devices, pressure gauges or level indicators.”

Amend the definition for “*Cryogenic receptacle*” to read as follows:

“*Closed cryogenic receptacle* means a thermally insulated pressure receptacle for refrigerated liquefied gases of a water capacity of not more than 1 000 litres;”

In the definition for “*Cylinder*”, delete “transportable”.

In the definition of “*Manual of Tests and Criteria*”, after “ST/SG/AC.10/11/Rev.7”, insert “and Amend.1”.

In the definition for “*Metal hydride storage system*”, replace “receptacle” by “pressure receptacle shell”.

In the definition for “*Pressure drum*”, delete “transportable”.

In the definition for “*Pressure receptacle*”, after “*Pressure receptacle* means”, add “a transportable receptacle intended for holding substances under pressure including its closure(s) and other service equipment and is”. The second modification does not apply to the English text.

In the definition for “*Receptacle*”, replace ““Cryogenic receptacle”” by ““Closed cryogenic receptacle”, “Open cryogenic receptacles””.

Amend the definition for “*Recycled plastics material*” to read as follows:

“*Recycled plastics material*” means material recovered from used industrial packagings that has been cleaned and prepared for processing into new packagings. The specific properties of the recycled material used for production of new packagings shall be assured and documented regularly as part of a quality assurance programme recognized by the competent authority. The quality assurance programme shall include a record of proper pre-sorting and verification that each batch of recycled plastics material has the proper melt flow rate, density, and tensile yield strength, consistent with that of the design type manufactured from such recycled material. This necessarily includes knowledge about the packaging material from which the recycled plastics have been derived, as well as awareness of the prior contents of those packagings if those prior contents might reduce the capability of new packagings produced using that material. In addition, the packaging

manufacturer's quality assurance programme under 6.1.1.4 of ADR shall include performance of the mechanical design type test in 6.1.5 of ADR on packagings manufactured from each batch of recycled plastics material. In this testing, stacking performance may be verified by appropriate dynamic compression testing rather than static load testing;

*NOTE:ISO 16103:2005 “Packaging – Transport packages for dangerous goods – Recycled plastics material”, provides additional guidance on procedures to be followed in approving the use of recycled plastics material. These guidelines have been developed based on the experience of the manufacturing of drums and jerricans from recycled plastics material and as such may need to be adapted for other types of packagings, IBCs and large packagings made of recycled plastics material.”*

In the definition for “Tank”, delete the Note at the end.

In the definition for “Tube”, delete “transportable”.

In the definition of “UN Model Regulations”, replace “twenty-first” by “twenty-second” and replace “(ST/SG/AC.10/1/Rev.21)” by “(ST/SG/AC.10/1/Rev.22)”.

Amend the definition for “Working pressure” to read as follows:

“Working pressure

- (a) For a compressed gas, means the settled pressure at a reference temperature of 15 °C in a full pressure receptacle;
- (b) For UN 1001 acetylene, dissolved, means the calculated settled pressure at a uniform reference temperature of 15 °C in an acetylene cylinder containing the specified solvent content and the maximum acetylene content;
- (c) For UN 3374 acetylene, solvent free, means the working pressure which was calculated for the equivalent cylinder for UN 1001 acetylene, dissolved.”

The Note remains unchanged.

In the definition of “Packing group”, delete the Note.

In the definition of “Over-moulded cylinder” insert “shell” after “coated welded steel inner cylinder” and after “surface of the steel cylinder”. The second amendment doesn’t apply to the English text.

Add the following new definitions:

“Fibre-reinforced plastics means material consisting of fibrous and/or particulate reinforcement contained within a thermoset or thermoplastic polymer (matrix);”

“Inner vessel, for a closed cryogenic receptacle, means the pressure vessel intended to contain the refrigerated liquefied gas;”

*“Pressure receptacle shell”* means a cylinder, a tube, a pressure drum or a salvage pressure receptacle without its closures or other service equipment, but including any permanently attached device(s) (e.g. neck ring, foot ring);

*NOTE: The terms “cylinder shell”, “pressure drum shell” and “tube shell” are also used.*

(Reference document: ECE/TRANS/WP.15/AC.1/2021/24/Add.1)

1.2.1 Delete the following definitions:

“ADR”, “ASTM”, “CGA”, “CIM”, “CMR”, “CSC”, “EN (standard)”, “IAEA”, “IBC”, “ICAO”, “IMO”, “ISO (standard)”, “MEGC”, “MEMU”, “RID”, “SADT”, “SAPT”, “UIC”, “UNECE”.

Amend the definition of “GHS” to read:

*“Globally Harmonized System of Classification and Labelling of Chemicals”* means the ninth revised edition of United Nations publication bearing this title (ST/SG/AC.10/30/Rev.9);”

(Reference documents: ECE/TRANS/WP.15/AC.1/160, Annex II and informal document INF.11)

1.2.2.1 In the table, after the entry for “Power”, add the following new entry:

Electrical resistance	$\Omega$ (ohm)	--	$1 \Omega = 1 \text{ kg} \cdot \text{m}^2 / \text{s}^3 / \text{A}^2$
-----------------------	----------------	----	--

(Reference document: ECE/TRANS/WP.15/AC.1/2021/24/Add.1)

Add a new section 1.2.3 to read as follows:

### **“1.2.3 List of abbreviations**

In ADN, abbreviations, acronyms and abbreviated designations of regulatory texts are used, with the following meaning:

#### **A**

*“ADR\*”* means the Agreement concerning the International Carriage of Dangerous Goods by Road;

*“ASTM”* means the American Society for Testing and Materials (ASTM International, 100 Barr Harbor Drive, PO Box C700, West Conshohocken, PA, 19428-2959, United States of America), www.astm.org;

#### **C**

*“CGA”* means the Compressed Gas Association, 8484 Westpark Drive, Suite 220, McLean, Virginia 22102, United States, www.cganet.com;

*“CIM\*\*”* means the Uniform Rules Concerning the Contract of International Carriage of Goods by Rail (Appendix B to the Convention concerning International Carriage by Rail (COTIF)), as amended;

*“CMR\*\*\*”* means the Convention on the Contract for the International Carriage of Goods by Road (Geneva, 19 May 1956), as amended;

*“CNG”* means compressed natural gas (see 1.2.1);

*“CSC”* means the International Convention for Safe Containers (Geneva, 1972) as amended and published by the International Maritime Organization (IMO), London;

*“CSI”* means criticality safety index (see 1.2.1);

**E**

"*EIGA*" means European Industrial Gas Association, 30 Avenue de l'Astronomie, 1210 Brussels (Belgium), [www.eiga.eu](http://www.eiga.eu);

"*EN*" (standard) means a European standard published by the European Committee for Standardization (CEN) (CEN, Avenue Marnix 17, B-1000 Brussels, Belgium), [www.cen.eu](http://www.cen.eu);

**F**

"*FRP*" means fibre-reinforced plastics (see 1.2.1);

**G**

"*GHS*" means Globally Harmonized System of Classification and Labelling of Chemicals (see 1.2.1);

**I**

"*IAEA*" means the International Atomic Energy Agency, P.O. Box 100, 1400 Vienna, Austria, [www.iaea.org](http://www.iaea.org);

"*IBC*" means intermediate bulk container (see 1.2.1);

"*ICAO*" means the International Civil Aviation Organization, 999 University Street, Montreal, Quebec H3C 5H7, Canada, [www.icao.org](http://www.icao.org);

"*IMDG*" see definition of "IMDG Code" in 1.2.1;

"*IMO*" means the International Maritime Organization, 4 Albert Embankment, London SE1 7SR, United Kingdom, [www.imo.org](http://www.imo.org);

"*ISO*" (standard) means an international standard published by the International Organization for Standardization, 1, rue de Varembé, 1204 Geneva 20, Switzerland, [www.iso.org](http://www.iso.org);

**L**

"*LNG*" means liquefied natural gas (see 1.2.1);

"*LPG*" means liquefied petroleum gas (see 1.2.1);

"*LSA*" (material) means low specific activity material (see 2.2.7.1.3);

**M**

"*MEGC*" means multiple-element gas container (see 1.2.1);

"*MEMU*" means mobile explosives manufacturing unit (see 1.2.1);

**N**

"*N.O.S.*" means not otherwise specified entry (see 1.2.1);

**R**

"*RID*" means Regulations concerning the International Carriage of Dangerous Goods by Rail (Appendix C of COTIF (Convention concerning international carriage by rail));

**S**

"*SADT*" means self-accelerating decomposition temperature (see 1.2.1);

"*SAPT*" means self-accelerating polymerization temperature (see 1.2.1);

"*SCO*" means surface contaminated object (see 2.2.7.1.3);

**T**

"*TI*" means transport index (see 1.2.1);

**U**

"*UIC*" means the International Union of Railways, 16 rue Jean Rey, 75015 Paris, France, [www.uic.org](http://www.uic.org);

"*UNECE*" means the United Nations Economic Commission for Europe, Palais des Nations, 8-14 avenue de la Paix, 1211 Geneva 10, Switzerland, [www.unece.org](http://www.unece.org);"

In the English version, footnotes \*, \*\*, \*\*\*, † read as follows:

\* The acronym "ADR" corresponds to the French term "Accord relatif au transport international des marchandises dangereuses par route".

\*\* The acronym "CIM" corresponds to the French term "Contrat de transport international ferroviaire de marchandises".

\*\*\* The acronym "CMR" corresponds to the French term "Convention relative au contrat de transport international de marchandises par route".

† The acronym "UIC" corresponds to the French term "Union internationale des chemins de fer".

(Reference documents: *ECE/TRANS/WP.15/253*, *ECE/TRANS/WP.15/AC.1/2021/24/Add.1* and editorial modifications)

**Chapter 1.4**

1.4.3.3 In (b), replace "date of the next" by "date specified for the next".

(Reference document: *ECE/TRANS/WP.15/AC.1/162*)

1.4.3.4 (c) Replace "exceptional check" by "exceptional inspection".

(Reference document: *ECE/TRANS/WP.15/AC.1/2021/23/Rev.1, Annex VI*)

**Chapter 1.6**

1.6.1.1 Replace "30 June 2021" by "30 June 2023" and "31 December 2020" by "31 December 2022".

1.6.1.41 Delete and add "1.6.1.41 (*Deleted*)".

1.6.1.44 Delete and add "1.6.1.44 (*Deleted*)".

1.6.1.46 Delete and add "1.6.1.46 (*Deleted*)".

(Reference document: *ECE/TRANS/WP.15/AC.1/162*)

1.6.1 Add the following new transitional measures:

"1.6.1.48 (*Reserved*)"

"1.6.1.49 The mark shown in Figure 5.2.1.9.2 applicable until 31 December 2022, may continue to be applied until 31 December 2026."

(Reference document: *ECE/TRANS/WP.15/AC.1/2021/24/Add.1*)

“1.6.1.50 For articles that meet the definition for DETONATORS, ELECTRONIC as described in 2.2.1.4 Glossary of names, and assigned to UN Nos. 0511, 0512 and 0513, the entries for DETONATORS, ELECTRIC (UN Nos. 0030, 0255 and 0456) may continue to be used until 30 June 2025.”

“1.6.1.51 Adhesives, paint and paint related materials, printing inks and printing ink related materials and resin solutions assigned to UN 3082 environmentally hazardous substance, liquid, N.O.S., packing group III in accordance with 2.2.9.1.10.6 as a consequence of 2.2.9.1.10.5<sup>1</sup> containing 0.025 % or more of the following substances, on their own or in combination:

- 4,5-dichloro-2-octyl-2H-isothiazol-3-one (DCOIT);
- octhiline (OIT); and
- zinc pyrithione (ZnPT);

may be carried until 30 June 2025 in steel, aluminium, other metal or plastic packagings, which do not meet the requirements of 4.1.1.3, when carried in quantities of 30 litres or less per packaging as follows:

- (a) In palletized loads, a pallet box or unit load device, e.g. individual packagings placed or stacked and secured by strapping, shrink or stretch-wrapping or other suitable means to a pallet; or
- (b) As inner packagings of combination packagings with a maximum net mass of 40 kg.”

Footnote 1 to read as follows:

“<sup>1</sup> Commission Delegated Regulation (EU) 2020/1182 of 19 May 2020 amending, for the purposes of its adaptation to technical and scientific progress, Part 3 of Annex VI to Regulation (EC) No 1272/2008 of the European Parliament and of the Council on classification, labelling and packaging of substances and mixtures (fifteenth ATP to the CLP), applicable from 1 March 2022.”

Adapt the following footnotes in chapter 1.6 accordingly.”

*(Reference document: ECE/TRANS/WP.15/AC.1/162)*

## Chapter 1.7

1.7.1 In Note 1, replace “persons” by “people”.

1.7.1.1 Amend the second sentence to read “ADN is based on the 2018 edition of the IAEA Regulations for the Safe Transport of Radioactive Material”.

At the end, replace “Standard” by “Standards”.

*(Reference document: ECE/TRANS/WP.15/AC.1/2021/24/Add.1)*

1.7.2.5 In the first sentence, replace “persons” by “people”.

*(Reference document: ECE/TRANS/WP.15/AC.1/162)*



## Chapter 1.8

- 1.8.5.4 In the third page of the “Model for report on occurrences during the carriage of dangerous goods”, in the cell for note (3), add a new entry at the end to read “17 MEMU” and renumber remaining entries accordingly.

(Reference document: ECE/TRANS/WP.15/253)

## Chapter 1.9

- 1.9.4 Add a reference to a new footnote 1 to read as follows:

“<sup>1</sup> *Multimodal guidelines (Inland TDG Risk Management Framework) may be consulted on the website of the Directorate General for Mobility and Transport of the European Commission* ([https://ec.europa.eu/transport/themes/dangerous\\_good/risk\\_management\\_framework\\_en](https://ec.europa.eu/transport/themes/dangerous_good/risk_management_framework_en))

(Reference document: ECE/TRANS/WP.15/253)

## Chapter 1.10

- 1.10.5 Delete footnotes 1 and 2. After “Convention on Physical Protection of Nuclear Material”, add “(INFCIRC/274/Rev.1, IAEA, Vienna (1980))”. After “Nuclear Security Recommendations on Physical Protection of Nuclear Material and Nuclear Facilities”, add “(INFCIRC/225/Rev.5, IAEA, Vienna (2011))”.

(Reference document: ECE/TRANS/WP.15/AC.1/2021/24/Add.1)

## Chapter 2.1

- 2.1.4.3.1 Under (a), number the indents as (i) to (iv). Under (b), number the indents as (i) and (ii).

(Reference document: ECE/TRANS/WP.15/AC.1/2021/24/Add.1)

## Chapter 2.2

- 2.2.1.1.7.5 In Note 3, number the indents as (a) to (d).

(Reference document: ECE/TRANS/WP.15/AC.1/2021/24/Add.1)

- 2.2.2.2.2 Amend the fifth indent to read:

“– Dissolved gases which cannot be classified under UN Nos. 1001, 1043, 2073 or 3318. For UN No. 1043, see special provision 642;”.

(Reference document: ECE/TRANS/WP.15/251)

- 2.2.3.3 In the List of collective entries, for F, F1, delete the entry for UN number 1169 and amend the entry for UN number 1197 to read: “1197 EXTRACTS, LIQUID, for flavour or aroma”.

- 2.2.41.4 In the last sentence of the first paragraph, after “The formulations” add “not listed in this sub-section but”.

In the table, add the following new entry in proper order:

(7-METHOXY-5-METHYL-BENZOTHIOPHEN-2-YL) BORONIC ACID	88-100	OP7				3230	(11)
--	--------	-----	--	--	--	------	------

Under the table, add the following new table note:

“(11) The technical compound with the specified concentration limits may contain up to 12 % water and up to 1 % organic impurities.”

2.2.52.4 In the last sentence, after “The formulations” add “not listed in this sub-section but”.

In the table, add the following new entries in proper order:

ACETYL ACETONE PEROXIDE	≤ 35	≥ 57		≥ 8	OP8			3107	32)
tert-BUTYLPEROXY ISOPROPYLCARBONATE	≤ 62		≥ 38		OP7			3105	
tert-HEXYL PEROXYPIVALATE	≤ 52 as a stable dispersion in water				OP8	+15	+20	3117	

Under “Remarks (refer to the last column of the Table in 2.2.52.4):” add the following entry at the end:

“32) Active oxygen ≤ 4.15 %”

2.2.7.2.3.1.4 Delete and insert “2.2.7.2.3.1.4 (Deleted)”.

2.2.7.2.3.1.5 Delete and insert “2.2.7.2.3.1.5 (Deleted)”.

2.2.7.2.3.4.1 (c) In the first sentence, replace “2.2.7.2.3.1.4” by “2.2.7.2.3.4.3”.

2.2.7.2.3.4.2 Replace “2.2.7.2.3.1.4” by “2.2.7.2.3.4.3”.

2.2.7.2.3.4.3 Insert a new 2.2.7.2.3.4.3 to read as follows:

“2.2.7.2.3.4.3 A solid material sample representing the entire contents of the package shall be immersed for 7 days in water at ambient temperature. The volume of water to be used in the test shall be sufficient to ensure that at the end of the 7-day test period the free volume of the unabsorbed and unreacted water remaining shall be at least 10 % of the volume of the solid test sample itself. The water shall have an initial pH of 6-8 and a maximum conductivity of 1 mS/m at 20 °C. The total activity of the free volume of water shall be measured following the 7-day immersion of the test sample.”

Renumber current paragraph 2.2.7.2.3.4.3 as 2.2.7.2.3.4.4 and replace “2.2.7.2.3.4.1 and 2.2.7.2.3.4.2” by “2.2.7.2.3.4.1, 2.2.7.2.3.4.2 and 2.2.7.2.3.4.3”.

2.2.8.1.5.2 In the second sentence, replace “OECD Test Guidelines<sup>6,7,8,9</sup>” by “OECD Test Guidelines Nos. 404<sup>6</sup>, 435<sup>7</sup>, 431<sup>8</sup> or 430<sup>9</sup>”. In the third sentence, replace “OECD Test Guidelines<sup>6,7,8,9</sup>” by “one of these or non-classified in accordance with OECD Test Guideline No. 439<sup>10</sup>,”. In the fourth sentence, delete “*in vitro*”. At the end, add the following new sentence: “If the test results indicate that the substance or mixture is corrosive, but the test method does not allow

discrimination between packing groups, it shall be assigned to packing group I if no other test results indicate a different packing group.”.

Add a footnote 10 to read “<sup>10</sup> *OECD Guideline for the testing of chemicals No. 439 “In Vitro Skin Irritation: Reconstructed Human Epidermis Test Method” 2015*”.

(Reference document: ECE/TRANS/WP.15/AC.1/2021/24/Add.1)

Renumber subsequent footnotes in Chapter 2.2 accordingly.

2.2.8.1.5.3 (c) (ii) Replace “ISO 3574 or Unified Numbering System (UNS) G10200 or a similar type” by “ISO 3574, Unified Numbering System (UNS) G10200”.

2.2.9.1.7 (g) Amend the beginning of the sentence to read “Except for button cells installed in equipment (including circuit boards), manufacturers ...”.

Table 2.4.3.1 In (a) and (b) (iii), replace “hr” by “h” wherever this unit appears.

2.2.4.3.4 (a) After (i), add a new note to read as follows:

**NOTE:** *In this situation, when EC<sub>x</sub> or NOEC of the tested mixture > 0.1 mg/l, there is no need to classify for long-term hazard under ADN.”*

(Reference document: ECE/TRANS/WP.15/AC.1/2021/24/Add.1)

## Chapter 3.2, Table A

For UN 1002, in column (6), add “397”.

For UN 1012, in column (2), amend the name and description to read “BUTYLENE”. In column (6), add “398”.

[For UN 1043, in column (6) insert “642”.

(Reference document: ECE/TRANS/WP.15/AC.1/158)]

Delete the five entries for UN 1169.

For UN 1197, packing groups II and III (five entries), in column (2) replace “EXTRACTS, FLAVOURING, LIQUID” by “EXTRACTS, LIQUID, for flavour or aroma”.

(Reference document: ECE/TRANS/WP.15/AC.1/2021/24/Add.1)

For UN No. 1345, in column (2), add “, not exceeding 840 microns and rubber content exceeding 45 %”.

(Reference document: ECE/TRANS/WP.15/251)

For UN No. 1872 In column (3b), amend “OT2” to read “O2”.

In column (5), delete “+ 6.1”.

(Reference document: ECE/TRANS/WP.15/251)

For UN 1891, in column (3a), replace “6.1” by “3”. In column (3b), replace “T1” by “FT1”. In column (5), replace “6.1” by “3+6.1”. In column (7a), replace “100 ml” by “1 L”. In column (7b), replace “E4” by “E2”.

(Reference document: ECE/TRANS/WP.15/AC.1/2021/24/Add.1)

For UN No. 2015 For the first entry, in column (2), before the existing text, insert “HYDROGEN PEROXIDE, STABILIZED or”.

(Reference document: ECE/TRANS/WP.15/251)

For UN No. 2426, amend the name and description in column (2) to read “AMMONIUM NITRATE, LIQUID (hot concentrated solution)”.

(Reference document: ECE/TRANS/WP.15/253)

For UN 3208, packing group II, in column (7b), replace “E0” by “E2”.

For UN 3209, packing group II, in column (7b), replace “E2” by “E0”.

For UN 3269, packing groups II and III, and UN 3527, packing groups II and III, in column (7b), replace “E0” by “See SP 340 in Chapter 3.3”.

(Reference document: ECE/TRANS/WP.15/AC.1/2021/24/Add.1)

For UN 3538, in column (6), add “396”.

(Reference document: ECE/TRANS/WP.15/AC.1/2021/24/Add.1)

For all UN numbers to which special provision 386 is assigned in column (6), insert in column (6) “676”. Applies to UN Nos. 1010, 1051, 1060, 1081, 1082, 1085, 1086, 1087, 1092, 1093, 1143, 1167, 1185, 1218, 1246, 1247, 1251, 1301, 1302, 1303, 1304, 1545, 1589, 1614, 1724, 1829, 1860, 1917, 1919, 1921, 1991, 2055, 2200, 2218, 2227, 2251, 2277, 2283, 2348, 2352, 2396, 2452, 2521, 2522, 2527, 2531, 2607, 2618, 2838, 3022, 3073, 3079, 3302, 3531, 3532, 3533 and 3534.

(Reference document: ECE/TRANS/WP.15/253)

Add the following new entry:

(1)	(2)	(3a)	(3b)	(4)	(5)	(6)	(7a)	(7b)	(8)	(9)	(10)	(11)	(12)	(13)
3550	COBALT DIHYDROXIDE POWDER, containing not less than 10 % respirable particles	6.1	T5	I	6.1		0	E5	*	*	*	*	*	*

\* To be completed by the informal working group on substances

(Reference document: ECE/TRANS/WP.15/AC.1/2021/24/Add.1)

**Note by the secretariat:** All the amendments related to Table B will be presented in a working document for the August 2022 session.

### Chapter 3.3

Special provision (SP) 119 At the end, add a new note to read as follows:

**“NOTE:** For the purposes of carriage, heat pumps may be considered as refrigerating machines.”

(Reference document: ECE/TRANS/WP.15/AC.1/162)

SP 188 (g) and (h) The amendment does not apply to the English text.

SP 225 After (a), insert the following new note:

**“NOTE:** *This entry applies to portable fire extinguishers, even if some components that are necessary for their proper functioning (e.g. hoses and nozzles) are temporarily detached, as long as the safety of the pressurized extinguishing agent containers is not compromised and the fire extinguishers continue to be identified as a portable fire extinguisher.”*

(Reference document: ECE/TRANS/WP.15/AC.1/2021/24/Add.1)

SP 291 At the end, add a new note to read as follows:

**“NOTE:** *For the purposes of carriage, heat pumps may be considered as refrigerating machines.”*

(Reference document: ECE/TRANS/WP.15/AC.1/162)

SP 327 In the first sentence, replace “5.4.1.1.3” by “5.4.1.1.3.1”.

(Reference document: ECE/TRANS/WP.15/253)

SP 363 At the end of paragraph (j), insert the following Note:

**“NOTE:** *On engines and machinery with a capacity of more than 450 l but containing 60 l of liquid fuel or less, labelling and placarding compliant with the above requirements are permitted.”*

(Reference document: ECE/TRANS/WP.15/253)

SP 389 Amend the first sentence to read as follows:

*“This entry only applies to lithium ion batteries or lithium metal batteries installed in a cargo transport unit and designed only to provide power external to the cargo transport unit.”*

(Reference document: ECE/TRANS/WP.15/AC.1/2021/24/Add.1)

At the beginning of the last sentence, insert “Except as provided in 1.1.3.6 of RID or ADR”.

(Reference document: ECE/TRANS/WP.15/251)

Replace “396-499 (*Reserved*)” by “399-499 (*Reserved*)”.

(Reference document: ECE/TRANS/WP.15/AC.1/2021/24/Add.1)

SP 591 After “the requirements”, insert “of Class 8”.

(Reference document: ECE/TRANS/WP.15/251)

SP 593 Amend to read as follows:

“593 This gas, when used for cooling goods not fulfilling the criteria of any class, e.g. medical or biological specimens, if contained in double wall receptacles which comply with the provisions of packing instruction P203, paragraph (6) for open cryogenic receptacles of 4.1.4.1 of ADR, is not subject to the requirements of ADN except as specified in 5.5.3.”

(Reference document: ECE/TRANS/WP.15/253)

SP 644 Insert the following new second indent:

“– The solution does not contain more than 93 % ammonium nitrate;”

(Reference document: ECE/TRANS/WP.15/253)

SP 650 In paragraph (e), replace “5.4.1.1.3” by “5.4.1.1.3.1”.

(Reference document: ECE/TRANS/WP.15/253)

SP 654 In the first sentence, replace “5.4.1.1.3” by “5.4.1.1.3.1”.

(Reference document: ECE/TRANS/WP.15/253)

SP 655 At the beginning of the first sentence, after “Cylinder” delete “and their closures”.

(Reference document: ECE/TRANS/WP.15/AC.1/2021/24/Add.1)

SP 663 Amend the first paragraph under “**General provisions:**” to read as follows:

“Packagings, discarded, empty, uncleaned with residues presenting a primary or subsidiary hazard of Class 5.1 shall not be loaded in bulk together with packagings, discarded, empty, uncleaned with residues presenting a hazard of other classes. Packagings, discarded, empty, uncleaned with residues presenting a primary or subsidiary hazard of Class 5.1 shall not be packed with other packagings, discarded, empty, uncleaned with residues presenting hazards of other classes in the same outer packaging.”

(Reference document: ECE/TRANS/WP.15/251)

SP 674 In sub-paragraph (a) General: In the first sentence replace “welded steel cylinders” by “welded steel cylinder shells”. At the end of the second sentence insert “shell” after “steel cylinder”. The second modification to the second sentence doesn’t apply to the English text. In the third sentence insert “shell” after “steel cylinder”.

In sub-paragraph (b) Basic population: Replace “inner cylinders” by “inner steel cylinder shells”.

In sub-paragraph (d) Traceability: In the first sentence insert “shell” after “steel cylinder”. In the second indent insert “shell” after “steel cylinder”.

(Reference document: ECE/TRANS/WP.15/AC.1/2021/24/Add.1)

Add the following new special provisions:

“396 Large and robust articles may be carried with connected gas cylinders with the valves open regardless of 4.1.6.5 of ADR provided:

- (a) The gas cylinders contain nitrogen of UN No. 1066 or compressed gas of UN No. 1956 or compressed air of UN No. 1002;
- (b) The gas cylinders are connected with the article through pressure regulators and fixed piping in such a way that the pressure of the gas (gauge pressure) in the article does not exceed 35 kPa (0.35 bar);
- (c) The gas cylinders are properly secured so that they cannot move in relation to the article and are fitted with strong and pressure resistant hoses and pipes;
- (d) The gas cylinders, pressure regulators, piping and other components are protected from damage and impacts during carriage by wooden crates or other suitable means;
- (e) The transport document includes the following statement “Transport in accordance with special provision 396”;

- (f) Cargo transport units containing articles carried with cylinders with open valves containing a gas presenting a risk of asphyxiation are well ventilated and marked in accordance with 5.5.3.6.”

“397 Mixtures of nitrogen and oxygen containing not less than 19.5 % and not more than 23.5 % oxygen by volume may be carried under this entry when no other oxidizing gases are present. A Class 5.1 subsidiary hazard label (model No. 5.1, see 5.2.2.2.2) is not required for any concentrations within this limit.”

“398 This entry applies to mixtures of butylenes, 1-butylene, cis-2-butylene and trans-2-butylene. For isobutylene, see UN No. 1055.

*NOTE:* For additional information to be added in the transport document, see 5.4.1.2.2 (e).”

(Reference document: ECE/TRANS/WP.15/AC.1/2021/24/Add.1)

“641 (Reserved)”

[“642 Except as authorized under 1.1.4.2, this entry of the UN Model Regulations shall not be used for the carriage of fertilizer ammoniating solutions with free ammonia. Otherwise, for carriage of ammonia solution, see UN Nos. 2073, 2672 and 3318.”]

(Reference document: ECE/TRANS/WP.15/AC.1/158)

“676 For the carriage of packages containing polymerizing substances the provisions of special provision 386, in conjunction with 7.1.7.3, 7.1.7.4, 5.4.1.1.15 and 5.4.1.2.3.1, need not be applied, when carried for disposal or recycling provided the following conditions are met:

- (a) Before loading an examination has shown that there is no significant deviation between the outside temperature of the package and the ambient temperature;
- (b) The carriage is effected within a period of not more than 24 hours from that examination;
- (c) The packages are protected from direct sunlight and from the impact of other sources of heat (e.g. additional loads that are being carried above ambient temperature) during carriage;
- (d) The ambient temperatures during the carriage are below 45 °C;
- (e) Vehicles and containers are adequately ventilated;
- (f) The substances are packed in packages with a maximum capacity of 1000 litres.

In assessing the substances for carriage under the conditions of this special provision, additional measures to prevent dangerous polymerization may be considered, for example the addition of inhibitors.”

(Reference document: ECE/TRANS/WP.15/253)

## Chapter 3.4

3.4.11 Number the indents as (a) and (b).

(Reference document: ECE/TRANS/WP.15/AC.1/2021/24/Add.1)

## Chapter 3.5

3.5.4.3 Number the indents as (a) and (b).

(Reference document: ECE/TRANS/WP.15/AC.1/2021/24/Add.1)

## Chapter 5.1

5.1.3 The amendment does not apply to the English version.

(Reference document: ECE/TRANS/WP.15/AC.1/162)

5.1.3.1 The amendment does not apply to the English version.

(Reference document: ECE/TRANS/WP.15/AC.1/162)

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

“A competent authority may approve provisions under which consignments that do not satisfy all the applicable requirements of ADN may be carried under special arrangement (see 1.7.4).”

(Reference document: ECE/TRANS/WP.15/AC.1/2021/24/Add.1)

## Chapter 5.2

5.2.1.6 At the end of footnote 1, add the following new indent:

“- For UN No. 1012 Butylene: 1-butylene, cis-2-butylene, trans-2-butylene, butylenes mixture.”

5.2.1.9.2 Remove the double asterisk in figure 5.2.1.9.2 and remove the note for the double asterisk below the figure.

5.2.1.10.1 Number the indents as (a) to (d). In (c), replace “Cryogenic receptacles” with “Closed or open cryogenic receptacles”.

5.2.1.10.2 (a) Replace “cryogenic receptacles” with “closed or open cryogenic receptacles”.

(Reference document: ECE/TRANS/WP.15/AC.1/2021/24/Add.1)

5.2.2.2.2 In the table, in the subheading for “Class 9 hazard”, delete “, including environmentally hazardous substances”.

(Reference document: ECE/TRANS/WP.15/AC.1/162)

## Chapter 5.3

5.3.2.1.5 Amend the note to read as follows:

**“NOTE:** This paragraph need not be applied to vehicles or wagons carrying containers for carriage in bulk, tanks and MEGCs with a maximum capacity of 3 000 litres.”

(Reference document: ECE/TRANS/WP.15/251)

5.3.2.1.7 The amendment does not apply to the English version.

(Reference document: ECE/TRANS/WP.15/AC.1/162)



## Chapter 5.4

5.4.1.1.3 Becomes 5.4.1.1.3.1.

(Reference document: ECE/TRANS/WP.15/253)

Insert a new 5.4.1.1.3.2 to read as follows:

“5.4.1.1.3.2 If it is not possible to measure the exact quantity of the waste at the place of loading, the quantity according to 5.4.1.1.1 (f) may be estimated for the following cases under the following conditions:

- (a) For packagings, a list of packagings including the type and the nominal volume is added to the transport document;
- (b) For containers, the estimation is based on their nominal volume and other available information (e.g. type of waste, average density, degree of filling);
- (c) For vacuum operated waste tanks, the estimation is justified (e.g. by means of an estimation provided by the consigner or by vehicle equipment).

Such estimation of the quantity is not allowed for:

- Exemptions for which the exact quantity is essential (e.g. 1.1.3.6 of RID or ADR);
- Waste containing substances mentioned in 2.1.3.5.3 or substances of Class 4.3;
- Tanks other than vacuum operated waste tanks.

A statement shall be included in the transport document, as follows:

“QUANTITY ESTIMATED IN ACCORDANCE WITH 5.4.1.1.3.2”.

(Reference document: ECE/TRANS/WP.15/253)

5.4.1.1.5 Amend the paragraph below the heading to read as follows:

“When dangerous goods are carried in salvage packagings in accordance with 4.1.1.19 of ADR, including large salvage packagings, larger size packagings or large packagings of appropriate type and performance level to be used as a salvage packaging, the words “**SALVAGE PACKAGING**” shall be added after the description of the goods in the transport document.

When dangerous goods are carried in salvage pressure receptacles in accordance with 4.1.1.20 of ADR, the words “**SALVAGE PRESSURE RECEPTACLE**” shall be added after the description of the goods in the transport document.”

(Reference document: ECE/TRANS/WP.15/AC.1/2021/24/Add.1)

5.4.1.1.11 Replace “6.7.2.19.6 (b)” by “6.7.2.19.6.1 (b)” (twice), replace “6.7.3.15.6 (b)” by “6.7.3.15.6.1 (b)” (twice) and replace “6.7.4.14.6 (b)” by “6.7.4.14.6.1 (b)” (twice).

- 5.4.1.1.15 In the heading, replace “substances stabilized by temperature control” by “stabilized and temperature controlled substances”.

Amend the text under this heading to read:

“Unless already part of the proper shipping name the word “**STABILIZED**” shall be added to the proper shipping name if stabilization is used and the words “**TEMPERATURE CONTROLLED**” shall be added to the proper shipping name if stabilization is by temperature control or a combination of chemical stabilization and temperature control (see 3.1.2.6).

If the words “TEMPERATURE CONTROLLED” are part of the proper shipping name (see also 3.1.2.6), the control and emergency temperatures (see 7.1.7) shall be indicated in the transport document, as follows:

**"Control temperature: ....°C Emergency temperature: .... °C"**

(Reference document: ECE/TRANS/WP.15/AC.1/2021/24/Add.1)

- 5.4.1.1.16 Delete and add “5.4.1.1.16 (Deleted)”.

- 5.4.1.1.21 Amend to read as follows:

“5.4.1.1.21 *Additional information in the case of the application of special provisions*

Where, in accordance with a special provision in Chapter 3.3, additional information is necessary, this additional information shall be included in the transport document.”

- 5.4.1.1 Add the following new 5.4.1.1.23:

“5.4.1.1.23 *Special provisions for the carriage of substances carried in molten state*

When a substance, which is solid in accordance with the definition in 1.2.1, is offered for carriage in the molten state, the qualifying word “**MOLTEN**” shall be added as part of the proper shipping name, unless it is already part of the proper shipping name (see 3.1.2.5);”

(Reference document: ECE/TRANS/WP.15/AC.1/2021/24/Add.1)

- 5.4.1.1 Insert the following new 5.4.1.1.24:

“5.4.1.1.24 *Special provisions for refillable pressure receptacles authorized by the United States of America Department of Transportation*

For carriage in accordance with 1.1.4.7, a statement shall be included in the transport document, as follows:

"CARRIAGE IN ACCORDANCE WITH 1.1.4.7.1" or

"CARRIAGE IN ACCORDANCE WITH 1.1.4.7.2", as appropriate.”

(Reference document: ECE/TRANS/WP.15/AC.1/162)

- 5.4.1.2.2 Add the following new sub-paragraph at the end:

“(e) For carriage of UN No. 1012, the transport document shall contain the name of the specific gas carried (see special provision 398 of Chapter 3.3) in brackets after the proper shipping name.”

(Reference document: ECE/TRANS/WP.15/AC.1/2021/24/Add.1)

5.4.2 In the first sub-paragraph, replace “with the transport document” by “to the maritime carrier by those responsible for packing the container”.

In the second sub-paragraph, in the first sentence, replace “; if not, these documents shall be attached” by “(see for example 5.4.5)”.

The third amendment to the French version does not apply to the English version.

Delete the Note after the second sub-paragraph.

In the third sub-paragraph, after “may”, insert “also”.

*(Reference document: ECE/TRANS/WP.15/253)*

## **Chapter 5.5**

5.5.2.4.1 Number the indents as (a) to (c).

*(Reference document: ECE/TRANS/WP.15/AC.1/2021/24/Add.1)*

## **Chapter 7.1**

7.1.7.3.2 (a) Replace “the word "STABILIZED"” by “the words "TEMPERATURE CONTROLLED””.

*(Reference document: ECE/TRANS/WP.15/AC.1/2021/24/Add.1)*

7.1.7.4.5 At the beginning of (c), (d) and (e), replace “Thermal insulation” by “Vehicle or container with thermal insulation”.

*(Reference document: ECE/TRANS/WP.15/251)*

## **Chapter 8.1**

8.1.2.1 In paragraph (b), delete “and, where necessary the container/vehicle packing certificate (see 5.4.2)”.

*(Reference document: ECE/TRANS/WP.15/253)*

---