



# **Economic and Social Council**

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## **Economic Commission for Europe**

### **Inland Transport Committee**

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

## **Agreement concerning the International Carriage of Dangerous Goods by Road (ADR)**

### **Draft amendments to annexes A and B of ADR**

#### **Addendum**

At its 111th session, the Working Party on the Transport of Dangerous Goods requested the secretariat to circulate an additional list of amendments for which the entry into force is scheduled for 1 January 2023 in the form of an addendum to document ECE/TRANS/WP.15/256, which the Chairperson will transmit to Contracting Parties through his Government for acceptance in accordance with the procedure set out in article 14 of ADR (see ECE/TRANS/WP.15/258, paragraph 63).

This document contains the requested additional list of amendments adopted by the Working Party at its 111th session.

## Chapter 1.1

- 1.1.3.6.2 In the first indent, replace “Class 1 explosives of UN Nos. 0029, 0030, 0059, 0065, 0073, 0104, 0237, 0255, 0267, 0288, 0289, 0290, 0360, 0361, 0364, 0365, 0366, 0439, 0440, 0441, 0455, 0456, 0500, 0511, 0512 and 0513” by “high consequence dangerous goods of Class 1 (in accordance with 1.10.3.1)”.

## Chapter 1.2

- 1.2.1 After the definition of “Tank-container”, insert:

“In addition:

*“Extra-large tank-container”* means a tank-container with a capacity of more than 40 000 litres.”

## Chapter 1.6

- 1.6.1 Add the following new transitional measures:

“1.6.1.52 Inner receptacles of composite IBCs manufactured before 1 July 2021 in accordance with the requirements of 6.5.2.2.4 in force up to 31 December 2020 and which are not in accordance with the requirements of 6.5.2.2.4 regarding the marks on the inner receptacles that are not readily accessible for inspection due to the design of the outer casing applicable as from 1 January 2021 may continue be used until the end of their period of use determined in 4.1.1.15.”

“1.6.1.53 High consequence dangerous goods of Class 1 carried in packages on a transport unit in quantities not exceeding those of 1.1.3.6 which, in accordance with the first indent of 1.1.3.6.2 in force until 31 December 2022, could be transported without applying the requirements of Chapter 1.10 may still be carried without applying the requirements of Chapter 1.10 until 31 December 2024.”

- 1.6.2 Add the following new transitional measures:

“1.6.2.21 Standard 14912:2005 referenced in packing instruction P200 (12) 3.4 of 4.1.4.1 in force up to 31 December 2022 may continue to be used for valve refurbishing or inspection until 31 December 2024.”

“1.6.2.22 Standard EN ISO 22434:2011 referenced in packing instruction P200 (13) 3.4 of 4.1.4.1 in force up to 31 December 2022 may continue to be used for valve refurbishing or inspection until 31 December 2024.”

- 1.6.3 Add the following new transitional measures and replace “1.6.3.58 to 1.6.3.99 (*Reserved*)” by “1.6.3.61 to 1.6.3.99 (*Reserved*)”:

“1.6.3.58 (*Reserved*)”

“1.6.3.59 Fixed tanks (tank-vehicles) and demountable tanks constructed before 1 July 2023 in accordance with the requirements in force up to 31 December 2022, but which do not, however, meet the requirements of special provision TE26 of 6.8.4 (b) applicable as from 1 January 2023 may continue to be used.”

“1.6.3.60 Fixed tanks (tank-vehicles) and demountable tanks that are already fitted with safety valves meeting the requirements of 6.8.3.2.9 as applicable from 1 January 2023 do not need to display the marks in accordance with 6.8.3.2.9.6 until the next intermediate or periodic inspection after 31 December 2023.”

- 1.6.4 Add the following new transitional measures:

“1.6.4.61 Tank-containers constructed before 1 July 2023 in accordance with the requirements in force up to 31 December 2022, but which do not meet the

requirements of 6.8.2.2.4, second and third paragraph, applicable from 1 January 2023, may still be used.”

- “1.6.4.62 Extra-large tank-containers constructed before 1 July 2023 in accordance with the requirements in force up to 31 December 2022, but which do not meet the requirements of 6.8.2.1.18, third paragraph, concerning the minimum thickness of the shell applicable as from 1 January 2023 may still be used.”
- “1.6.4.63 Tank-containers constructed before 1 July 2023 in accordance with the requirements in force up to 31 December 2022, but which do not, however, meet the requirements of special provision TE26 of 6.8.4 (b) applicable as from 1 January 2023 may continue to be used.”
- “1.6.4.64 Tank-containers that are already fitted with safety valves meeting the requirements of 6.8.3.2.9 as applicable from 1 January 2023 do not need to display the marks in accordance with 6.8.3.2.9.6 until the next intermediate or periodic inspection after 31 December 2023.”

## Chapter 1.8

- 1.8.5.4 In the model for the “Report on occurrences during the carriage of dangerous goods”, section 6, note (3), add a new entry at the end to read “18 Extra-large tank-container”.

## Chapter 1.10

- 1.10.4 Delete the first sentence. In the second sentence, replace “In addition, the requirements” by “The requirements”.

## Chapter 3.2, Table A

For UN Nos. 1038, 1961, 1966, 1972, 3138 and 3312, in column (13), insert “TE26” after “TU18”.

## Chapter 4.1

4.1.4.1, P200 In (11), replace the row for “EN 1439:2017” by the following new row:

(7) and (10) ta (b)	EN 1439:2021	LPG equipment and accessories - Procedure for checking transportable refillable LPG cylinders before, during and after filling
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In (12), 2.1, replace “EN 1439:2017” by “EN 1439:2021 (or until 31 December 2024, EN 1439:2017)”.

In (12) 3.4, replace “EN 14912:2005” by “EN 14912:2022”.

In (13) 3.4, replace “EN ISO 22434:2011” by “EN ISO 22434:2022”.

In table 2, for UN Nos. 1008, 1859 and 2189, in the second row, in column “Special packing provisions”, insert “a”.

## Chapter 5.4

- 5.4.2 In footnote 6, first sentence, replace “Amendment 39-18” by “Amendment 40-20”.

In footnote 6, in the text reproducing section 5.4.2 of the IMDG Code:

- 5.4.2.2 At the end of the first sentence, delete “one to the other”.

5.4.2.3 The amendment doesn't apply to the English text.

5.4.2.4 The amendment doesn't apply to the English text.

## Chapter 6.2

6.2.3.5.1 In Note 3, replace "EN ISO18119:2018" by "EN ISO 18119:2018 + A1:2021".

6.2.4.1 Amend the table, under "for design and construction of pressure receptacles or pressure receptacle shells" as follows:

- The amendment to column (2) for standard "EN ISO 18119:2018" doesn't apply to the English text.
- For standard "EN 12245:2009 + A1:2011", in column (4), replace "Until further notice" by "Between 1 January 2013 and 31 December 2024".
- After the row for standard "EN 12245:2009 + A1:2011", insert the following new row:

EN 12245:2022	Transportable gas cylinders – Fully wrapped composite cylinders <i><b>NOTE:</b> This standard shall not be used for gases classified as LPG.</i>	6.2.3.1 and 6.2.3.4	Until further notice	
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- The amendment to the title in column (2) for standard "EN 14427:2004", in column (2), doesn't apply to the English text.
- For standard "EN 14427:2004 + A1:2005", in column (2), amend the title to read "Transportable refillable composite cylinders for LPG – Design and construction".
- The amendment to the title in column (2) for standard "EN 14427:2014" doesn't apply to the English text.
- For standard "EN 14427:2014", in column (4), replace "Until further notice" by "Between 1 January 2015 and 31 December 2024".
- After the row for standard "EN 14427:2014", insert the following new row:

EN 14427:2022	LPG equipment and accessories – Transportable refillable composite cylinders for LPG – Design and construction	6.2.3.1 and 6.2.3.4	Until further notice	
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Amend the table, under "for design and construction of closures" as follows:

- For standard "EN ISO 17871:2015 + A1:2018", in column (4), replace "Until further notice" by "Between 1 January 2019 and 31 December 2024".
- After the row for standard "EN ISO 17871:2015 + A1:2018", insert the following new row:

EN ISO 17871:2020	Gas cylinders – Quick-release cylinder valves – Specification and type testing	6.2.3.1, 6.2.3.3 and 6.2.3.4	Until further notice	
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- For standard "EN ISO 14246:2014 + A1:2017", in column (4), replace "Until further notice" by "Between 1 January 2019 and 31 December 2024".
- After the row for standard "EN ISO 14246:2014 + A1:2017", insert the following new row:

EN ISO 14246:2022	Gas cylinders – Cylinder valves – Manufacturing tests and examinations	6.2.3.1 and 6.2.3.4	Until further notice	
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- At the end of the table, add the following row:

EN ISO 23826:2021	Gas cylinders – Ball valves – Specification and testing	6.2.3.1 and 6.2.3.3	Mandatorily from 1 January 2025	
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6.2.4.2 Amend the table as follows:

- For standard “EN 1251-3:2000”, in column (3), replace “Until further notice” by “Until 31 December 2024”.
- After the row for standard “EN 1251-3:2000”, insert the following new row:

EN ISO 21029-2:2015	Cryogenic vessels – Transportable vacuum insulated vessels of not more than 1 000 litres volume – Part 2: Operational requirements <i><b>NOTE:</b> Notwithstanding clause 14 of this standard, pressure relief valves shall be periodically inspected and tested at intervals not exceeding 5 years.</i>		Mandatorily from 1 January 2025	
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- For standard “EN ISO 22434:2011”, in column (3), replace “Until further notice” by “Until 31 December 2024”.
- After the row for standard “EN ISO 22434:2011”, insert the following new row:

EN ISO 22434:2022	Gas cylinders – Inspection and maintenance of valves		Mandatorily from 1 January 2025	
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- For standard “EN 14912:2015”, in column (3), replace “Mandatorily from 1 January 2019” by “Until 31 December 2024”.
- After the row for standard “EN 14912:2015”, insert the following new row:

EN 14912:2022	LPG equipment and accessories – Inspection and maintenance of LPG cylinder valves at time of periodic inspection of cylinders		Mandatorily from 1 January 2025	
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## Chapter 6.8

- 6.8.2.1.18 In the right hand-column, in the third paragraph, after “3 mm” add “, or 4.5 mm if the tank is an extra-large tank-container”.
- 6.8.2.2.4 In the right-hand column, after the first sentence, insert:

“These openings for extra-large tank-containers intended for the carriage of substances in the liquid state which are not divided by partitions or surge plates into sections of not more than 7 500 litres capacity shall be provided with closures designed for a test pressure of at least 0.4 MPa (4 bar).

Hinged dome covers shall not be permitted for extra-large tank-containers with a test pressure of more than 0.6 MPa (6 bar).”

6.8.2.6.1 Amend the table, under “For design and construction of tanks” as follows:

- For standard “EN 13094:2015”, in column (4), replace “Until further notice” by “Between 1 January 2017 and 31 December 2024”.
- After the row for standard “EN 13094:2015”, insert the following new row:

EN 13094:2020 + A1:2022	Tanks for the transport of dangerous goods – Metallic gravity-discharge Design and construction	6.8.2.1	Until further notice	
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Amend the table, under “For equipment”, as follows:

- For standard “EN 12252:2014”, in column (2), renumber the Note as Note 1 and add the following Note 2:

**“NOTE 2:** *Safety valves are mandatory from 1 January 2024.*”

- For standard “EN 12252:2014”, in column (4), replace “Until further notice” by “Between 1 January 2017 and 31 December 2024”.
- After the row for “EN 12252:2014”, insert the following new row:

EN 12252:2022	LPG equipment and accessories – Equipping of LPG road tankers <b>NOTE 1:</b> <i>Road tankers is to be understood in the meaning of “fixed tanks” and “demountable tanks” as per ADR.</i> <b>NOTE 2:</b> <i>Safety valves are mandatory from 1 January 2024.</i>	6.8.3.2 and 6.8.3.4.9	Until further notice	
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- At the end, add the following new row:

EN ISO 23826:2021	Gas cylinders – Ball valves – Specification and testing	6.8.2.1.1 and 6.8.2.2.1	Mandatorily from 1 January 2025	
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6.8.3.2.9 Insert the following new 6.8.3.2.9.6:

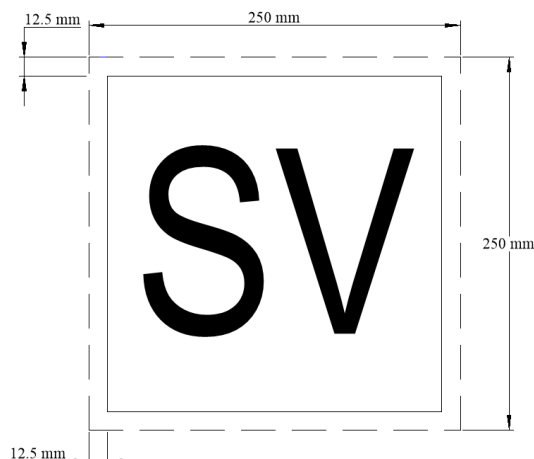
“6.8.3.2.9.6 Safety valve mark

6.8.3.2.9.6.1 Tanks fitted with safety valves in accordance with 6.8.3.2.9.1 to 6.8.3.2.9.5 shall display the mark as set out in 6.8.3.2.9.6.3 to 6.8.3.2.9.6.6.

6.8.3.2.9.6.2 Tanks not fitted with safety valves in accordance with 6.8.3.2.9.1 to 6.8.3.2.9.5 shall not display the mark as set out in 6.8.3.2.9.6.3 to 6.8.3.2.9.6.6.

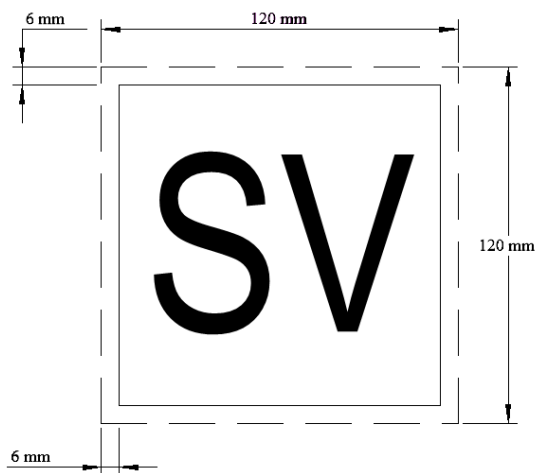
6.8.3.2.9.6.3 The mark shall consist of a white square with minimum dimensions of 250 mm × 250 mm. The line inside the edge shall be black, parallel and approximately 12.5 mm from the outside of that line to the outside edge of the mark. The

letters "SV" shall be black, a minimum of 120 mm high and have a minimum stroke thickness of 12 mm.



6.8.3.2.9.6.4 For demountable tanks | For tank-containers

with a capacity of not more than 3 000 litres the mark may be reduced in size to not less than 120 mm × 120 mm. The line inside the edge shall be black, parallel and approximately 6 mm from the outside of that line to the outside edge of the mark. The letters "SV" shall be black, a minimum of 60 mm high and have a minimum stroke thickness of 6 mm.



6.8.3.2.9.6.5 The material used shall be weather-resistant and it shall be ensured that the mark is durable. The mark shall not become detached from its mount in the event of 15 minutes' engulfment in fire. It shall remain affixed irrespective of the orientation of the tank.

6.8.3.2.9.6.6 The letters "SV" shall be indelible and shall remain legible after 15 minutes' engulfment in fire.

6.8.3.2.9.6.7 The marks shall be displayed on both sides and the rear of fixed tanks (tank-vehicles) and on both sides and both ends of demountable tanks.

The marks shall be displayed on both sides and both ends of tank-containers. For tank-containers with a capacity of less than 3 000 litres the marks may be displayed either on both sides or on both ends.

”

6.8.3.6 At the end of the table, add the following row:

EN ISO 23826:2021	Gas cylinders – Ball valves – Specification and testing	6.8.2.1.1 and 6.8.2.2.1	Mandatorily from 1 January 2025	
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6.8.4 (b) Add the following new special provision:

“TE26 All filling and discharge connections, including those in the vapour phase, of tanks intended for the carriage of flammable refrigerated liquefied gases shall be equipped with an instant closing automatic stop-valve (see 6.8.3.2.3) as close as possible to the tank.”

## Chapter 9.2

9.2.1.1 In the table, after the row for 9.2.4.5, add the following new row:

9.2.4.6	Electric power train			X		
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In the first column, renumber the current 9.2.4.6, 9.2.4.7 and 9.2.4.7.1 to 9.2.4.7.6 as 9.2.4.7, 9.2.4.8 and 9.2.4.8.1 to 9.2.4.8.6 respectively.

9.2.2.1 In the second paragraph, replace “as a whole” by “, with the exception of the electric power train in compliance with the technical provisions of UN Regulation No. 100<sup>1</sup>, as amended at least by the 03 series of amendments.”

Footnote 1 reads:

“<sup>1</sup> UN Regulation No. 100 (Uniform provisions concerning the approval of vehicles with regard to specific requirements for the electric power train).”

Renumber subsequent footnotes accordingly.

9.2.2.2.1 In the third paragraph, replace “or ISO 6722-2:2013” by “, ISO 6722-2:2013, ISO 19642-3:2019, ISO 19642-4:2019, ISO 19642-5:2019 or ISO 19642-6:2019”.

9.2.2.2.2 In the third paragraph, after “ISO 14572:2011” insert “, ISO 19642-7:2019, ISO 19642-8, ISO 19642-9 or ISO 19642:10:2019”.

9.2.3.1.1 At the end, add the following new sentence:

“Vehicles equipped with an electric regenerative braking system shall fulfil all relevant technical requirements of UN Regulation No. 13<sup>5</sup>, as amended at least by the 11 series of amendments, as applicable.”

9.2.4.3 After the heading, add a new note to read as follows:

“**NOTE:** 9.2.4.3 likewise applies to fuel tanks and cylinders used for hybrid vehicles which include an electric power train in the mechanical driveline of the internal combustion engine or use an internal combustion engine to drive a generator to energize the electric power train.”

9.2.4.4 After the heading, add a new note to read as follows:

“**NOTE:** 9.2.4.4 likewise applies to hybrid vehicles which include an electric power train in the mechanical driveline of the internal combustion engine or use an internal combustion engine to drive a generator to energize the electric power train.”

9.2.4 Add a new subsection 9.2.4.6 to read as follows:

“**9.2.4.6 Electric power train**

**NOTE:** 9.2.4.6 likewise applies to hybrid vehicles that include an electric power train in the mechanical driveline of an internal combustion engine. Electric power trains shall not be used for EX and FL vehicles.



The electric power train shall meet the requirements of UN Regulation No. 100<sup>1</sup>, as amended at least by the 03 series of amendments. Measures shall be taken to prevent any danger to the load by heating or ignition.”

Footnote 1 reads as above.

Renumber the existing 9.2.4.6 and 9.2.4.7 as 9.2.4.7 and 9.2.4.8 respectively. Under 9.2.4.7, renumber the paragraphs and cross-references accordingly.

### **Chapter 9.3**

- 9.3.2.2      Replace “9.2.4.7.1, 9.2.4.7.2, 9.2.4.7.5 and 9.2.4.7.6” by “9.2.4.8.1, 9.2.4.8.2, 9.2.4.8.5 and 9.2.4.8.6”.

### **Chapter 9.7**

- 9.7.7.1      In the first sentence, replace “9.2.4.7.1, 9.2.4.7.2, 9.2.4.7.5” by “9.2.4.8.1, 9.2.4.8.2, 9.2.4.8.5”. In the last sentence, replace “9.2.4.7.3 and 9.2.4.7.4” by “9.2.4.8.3 and 9.2.4.8.4”.

### **Chapter 9.8**

- 9.8.6.1      Replace “9.2.4.7.1, 9.2.4.7.2, 9.2.4.7.5, 9.2.4.7.6” by “9.2.4.8.1, 9.2.4.8.2, 9.2.4.8.5, 9.2.4.8.6”.
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