TECHNICAL BULLETIN

Prepared by WG-2 TB 48/23 – April 2023

DOT Cylinders under ADR and TPED Cylinders in DOT Jurisdiction

1. TPED cylinders for use under DOT jurisdiction

Statement in 49CFR171.2

§ 171.23 Requirements for specific materials and packagings transported under the ICAO Technical Instructions, IMDG Code, Transport Canada TDG Regulations, or the IAEA Regulations.
* * * * *
(3) Pi-marked pressure receptacles. Pressure receptacles that are marked with a pi mark in accordance with the European Directive 2010/35/EU (IBR, see § 171.7) on transportable pressure equipment (TPED) and that comply with the requirements of Packing Instruction P200 or P208 and 6.2 of ECE/TRANS/ 257 (Vol. I), the Agreement Concerning the International Carriage of Dangerous Goods by Road (ADR) (IBR, see § 171.7) concerning pressure relief device use, test period, filling ratios, test pressure, maximum working pressure, and material compatibility for the lading contained or gas being filled, are authorized as follows:

(i) Filled pressure receptacles imported for intermediate storage, transport to point of use, discharge, and export without further filling; and

(ii) Pressure receptacles imported or domestically sourced for the purpose of filling, intermediate storage, and export.

(iii) (iii) The bill of lading or other shipping paper must identify the cylinder and include the following certification: ‘‘This cylinder (These cylinders) conform(s) to the requirements for pi-marked cylinders found in 171.23(a)(3).’’

Conclusion of EIGA members:

Scope: TPED cylinders and their accessories (cylinder, valve, and cap/guard); marked as defined under TPED.

Allowance under DOT jurisdiction:

- Import of filled TPED cylinders for intermediate storage, transportation to their point of use, followed by discharge and export without re-filling
- Import of empty TPED cylinders (from Europe or domestic sources) for filling, intermediate storage, and export
- Addition to the shipping paper
  “This cylinder (These cylinders) conform(s) to the requirements for pi-marked cylinders found in 171.23(a)(3).’’

Important:

- It is not required to use valve(s) with Pressure Relief Devices (PRD). These PRDs do not have to follow the DOT requirements for valves (e.g, CGA V1, CGA S-1.1) There are no special requirements for the valve outlet.

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2. DOT cylinders under ADR jurisdiction

Statement in ADR / 2023

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 RID Contracting States/Contracting Parties of ADR 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 of RID/ADR.

c) The provisions of 4.1.6.12 and 4.1.6.13 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.

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."

Conclusion of EIGA members:

Scope: Refillable pressure receptacles designed and approved according to 49CFR (the DOT regulation)

Allowance under TPED / ADR jurisdiction:

- Import of gases in DOT cylinders
  - Import to end point of transport chain / end use or to temporary storage in ADR member state
  - In case temporary storage is used, transport from temporary storage to end point of transport chain / end use in ADR member state
  - Additional comment is added to the transport documents: "CARRIAGE IN ACCORDANCE WITH 1.1.4.7.1"

- Export of gases in DOT cylinders

- Filling of DOT cylinders in ADR member states for export to non-ADR member states that allow transport and use of DOT cylinders, when the following provisions are met:

  - Filling conditions are aligned with the DOT regulation

  - Marking and labelling according to chapter 5.2 ADR
    - UN number
    - UN shipping name etc see ISO 7225
    - Tare weight in case filled by weight (in kg)
    - Year of next retest

  - DOT cylinders that are out of re-test cannot be filled. However, transport for purpose of performing periodic inspections (or disposal) is permitted, given items listed 4.1.6.13 are fulfilled:
    - There is absence of damage
    - All required markings are legible
    - The cylinder is leak tight
    - Pressure receptacles including service equipment are in good condition

  - Additional comment is added to the transport documents "CARRIAGE IN ACCORDANCE WITH 1.1.4.7.2"

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