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Item 6(b) of the provisional agenda

PROPOSALS FOR AMENDMENTS TO RID/ADR/ADN */

New proposals

Modification of Special Regulation 653

Special regulation for small cylinders containing gases, class 2, code 1A

Transmitted by the European Industrial Gases Association (EIGA)

Background

1. Special provision 653 exempts small carbon dioxide (CO₂) cylinders below 0.5 litre from RID and ADR. These small CO₂ cylinders are mainly used for carbonating of tap water in private households. For avalanche-airbags small nitrogen cylinders of 0.22 litres, 300 bars are used.
2. Both these gases, CO₂ and nitrogen, are listed as gases of Class 2 under code 1 A (asphyxiant gases), in table A of Chapter 3.2.

*/ Circulated by the Central Office for International Carriage by Rail (OCTI) under the symbol OCTI/RID/RC/2007/40.

Discussion

3. Currently, cylinders above 0.5 litre for CO₂ are commonly used. As the size of the small cylinders may vary, it is proposed to exempt small cylinders for gases of Class 2, code 1 A, on the basis of the **product of size and test pressure** of the cylinders rather than on the basis of the **capacity** only.

4. The maximum product-litre volume would be 250 bar-litres.

For CO₂, this would mean a size of cylinders of up to 1 litre (250 bar-litre for a 250 bar test pressure). For nitrogen it would mean a size of the cylinders up to 0, 55 litres (300 bar-litre for a 450 bar test pressure).

Proposal

5. It is proposed to modify Special Provision 653 to read as follows:

653 The carriage of this gas in cylinders is not subject to the other provisions of ADR if the following conditions are met:

- The provisions for construction and testing of cylinders are observed;
- The product of the test pressure and of the volume of the cylinder does not exceed 250 bar-litre;
- The cylinders are contained in outer packagings which at least meet the requirements of Part 4 for combination packagings, and the general packing provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.5 to 4.1.1.7 are observed;
- The cylinders are not packed together with other dangerous goods;
- The total gross mass of a package does not exceed 30 kg;
- **The total transport mass of each delivery does not exceed 300 kg; and**
- Each package is clearly and durably marked **with the relevant UN number of the gas** ". This marking is displayed within a diamond-shaped area surrounded by a line that measures at least 100 mm by 100 mm.

Justification

6. The proposal adjusts the provisions to common practice.

Safety

No implications.

Feasibility

No implications.

Enforceability

No implications.