

Economic Commission for Europe

Inland Transport Committee

Working Party on the Transport of Dangerous Goods

Joint Meeting of the RID Committee of Experts and the Working Party on the Transport of Dangerous Goods

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Item 5 (b) of the provisional agenda

Proposals for amendments to RID/ADR/ADN: new proposals

Increase of the maximum allowed internal pressure for aerosol dispensers

Transmitted by the European Aerosol Federation (FEA)

Summary

- Executive summary:** The aim of this proposal is to align the RID/ADR/ADN with the new provisions of the Aerosol Dispensers Directive 75/234/EEC related to the maximum allowed internal pressure.
- Reference documents:**
- (a) UN/SCETDG/37/INF.19 - (FEA) Aerosols (UN 1950) – Maximum internal pressure at 50°C
 - (b) Commission Directive (EU) 2016/2037 of 21 November 2016 amending Council Directive 75/324/EEC
- Action to be taken:** Comment on the best choice to amend the text in 6.2.6.1.5 to increase the maximum allowed internal pressure at 50 °C from 1.32 MPa (13.2 bar) to 1.5 MPa (15 bar).

Introduction

1. Directive 75/324/EEC lays down rules for the placing on the market of aerosol dispensers. It harmonises the safety requirements for aerosol dispensers, including inter alia the requirements relating to pressure hazards.
2. Technical progress and innovation led to the development of aerosol dispensers with innovative non-flammable compressed or dissolved propellants, as nitrogen, compressed air or carbon dioxide. However, the current maximum allowable pressure of aerosol dispensers provided for by Directive 75/324/EEC, as well as RID/ADR/ADN, limit the development of aerosol dispensers with those propellants as it negatively affects the spray effectiveness of such aerosol dispensers throughout their lifetime. More particularly, the drop of pressure of such aerosol dispensers during their use results to a less efficient yield of contents and to a noticeable deterioration in their performance.

3. FEA previously informed the experts of the SCETDG of such development through informal document UN/SCETDG/37/INF.19 (session of June 2010).

4. Commission Directive (EU) 2016/2037 increases the maximum allowable pressure of aerosol dispensers with a non-flammable compressed or dissolved propellant from 13.2 to 15 bar, without affecting the safety of those aerosol dispensers, as follows:

The pressure at 50 °C in the aerosol dispenser must not exceed the values provided for in the following table, depending upon the content of gases in the aerosol dispenser:

<i>Content of gases</i>	<i>Pressure at 50 °C</i>
<i>Liquefied gas or mixture of gases having a flammable range with air at 20 °C and a standard pressure of 1.013 bar</i>	<i>12 bar</i>
<i>Liquefied gas or mixture of gases not having a flammable range with air at 20 °C and a standard pressure of 1.013 bar</i>	<i>13,2 bar</i>
<i>Compressed gases or gases dissolved under pressure not having a flammable range with air at 20 °C and a standard pressure of 1.013 bar</i>	<i>15 bar</i>

Discussion

5. FEA therefore proposes to amend the first sentence of 6.2.6.1.5 to read:

OPTION 1 (streamlined)

“The internal pressure of aerosol dispensers at 50 °C shall exceed neither two-thirds of the test pressure nor **1.5 MPa (15 bar)**.”

OPTION 2 (with full detailed)

“The internal pressure of aerosol dispensers at 50 °C shall exceed neither two-thirds of the test pressure nor **1.2 MPa (12 bar) when using flammable liquefied gases, 1,32 MPa (13.2 bar) when using non-flammable liquefied gases, and 1.5 MPa (15 bar) when using non-flammable compressed or dissolved gases.**”
