

25 July 2024

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## Global registry

**Created on 18 November 2004, pursuant to Article 6 of the Agreement concerning the establishing of global technical regulations for wheeled vehicles, equipment and parts which can be fitted and/or be used on wheeled vehicles (ECE/TRANS/132 and Corr.1) done at Geneva on 25 June 1998**

### **Addendum 13: UN Global technical regulation No. 13**

#### **Hydrogen and Fuel Cell Vehicles**

#### **Amendment 1**

#### **Corrigendum**

Established in the Global Registry on 26 June 2024



UNITED NATIONS

*Section G, paragraph 166, second sentence, amend to read:*

"166. ... According to the discussion in paragraphs 82 to 85 of section E.1.(c) of the preamble, the total discharge from a vehicle with liquefied hydrogen may therefore be 150 mL/min for a garage size of 30.4 m<sup>3</sup>."

*Paragraph 5.1.3.3., amend to read:*

"5.1.3.3. Extreme temperature static gas pressure leak/permeation test (pneumatic).

The test shall be conducted in accordance with paragraphs 6.2.4.2. and 6.2.4.3.

The maximum allowable hydrogen discharge from the CHSS is 46 mL/h/L water capacity of the CHSS.

Any single point of localized external leakage measured in accordance with paragraph 6.2.4.3. shall not exceed 0.005 mg/sec (3.6 Nml/min)."

*Paragraph 7.4.2.1., amend to read:*

"7.4.2.1. Boil-off test

The test is conducted according to the following procedure:

- (a) For pre-conditioning, the container is fuelled with liquid hydrogen to the specified maximum filling level. Hydrogen is subsequently extracted until it meets half filling level, and the system is allowed to completely cool down for at least 24 hours and a maximum of 48 hours;
- (b) The container is filled to the specified maximum filling level;
- (c) The container is pressurized until boil-off pressure is reached;
- (d) The test lasts for at least another 48 hours after boil-off started and is not terminated before the pressure stabilizes. Pressure stabilization has occurred when the average pressure does not increase over a two hour period.

The pressure of the inner container is recorded or written during the entire test. The test is passed successfully if the following requirements are fulfilled:

- (a) The pressure stabilizes and stays below MAWP during the whole test;
- (b) The pressure relief devices are not allowed to open during the whole test."

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