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## Committee of Experts on the Transport of Dangerous Goods and on the Globally Harmonized System of Classification and Labelling of Chemicals

Sub-Committee of Experts on the Transport of Dangerous Goods

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Item 5 (b) of the provisional agenda

Transport of gases: miscellaneous

# Composite UN pressure receptacles with steel liners

### Transmitted by the expert from Canada\*

#### Introduction

1. This document proposes to add text to packing instruction P200(5)(d) to ensure that when composite pressure receptacles with steel liners are used for the transport of gases with a risk of hydrogen embrittlement, only those with compatible steel liners are used.

## **Proposal**

2. Amend the text of P200(5)d as shown. (New text is <u>underlined</u>).

"d: When steel pressure receptacles or composite pressure receptacles with steel liners are used, only those bearing the "H" mark in accordance with 6.2.2.7.4 (p) are permitted.".

### **Justification**

3. This document addresses an inconsistency which has resulted from what appears to be an oversight. 6.2.2.7.4 specifies the marking requirements for cylinders and tubes.

<sup>\*</sup> In accordance with the programme of work of the Sub-Committee for 2019-2020 approved by the Committee at its ninth session (see ST/SG/AC.10/C.3/108, paragraph 141 and ST/SG/AC.10/46, paragraph 14).

6.2.2.7.4 (p) requires cylinders and tubes to be marked with an "H" when the steel of the cylinder, tube or composite liner is compatible with hydrogen embrittling gases:

"(p) In the case of steel pressure receptacles and composite pressure receptacles with steel liner intended for the transport of gases with a risk of hydrogen embrittlement, the letter "H" showing compatibility of the steel (see ISO 11114-1:2012);".

4. Based on the preceding text, it is clear that these provisions apply to steel pressure receptacles and composite pressure receptacles with steel liners. P200(5)d only refers to this mark for steel pressure receptacles but should also refer to this mark for composite pressure receptacles with steel liners in a manner that is consistent with P205(4), which refers to composite pressure receptacles with steel liners in the requirements for UN 3468 (Hydrogen in a metal hydride storage system):

P205

(4) When steel pressure receptacles or composite pressure receptacles with steel liners are used, only those bearing the "H" mark, in accordance with 6.2.2.9.2(j) shall be used

The text in 6.2.2.9.2 (j) is identical to the text in 6.2.2.7.4 (p).