

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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MISCELLANEOUS PROPOSALS OF AMENDMENTS TO THE MODEL REGULATIONS ON THE TRANSPORT OF DANGEROUS GOODS

Comments on paper ST/SG/AC.10/C.3/2009/16/Rev.1 (Germany)

Transmitted by the expert from the United Kingdom

1. In the paper ST/SG/AC.10/C.3/2009/16/Rev.1 the expert from Germany invites the expert from the United Kingdom to justify extending the use of salvage pressure receptacles to liquids in Table 3 of P200 as suggested in earlier comments. To gather supporting information from operators of such salvage pressure receptacles, the Speciality Gases experts of EIGA were consulted.
2. The answer from the EIGA experts was that they were “of the opinion that all substances that may be transported in pressure receptacles should be allowed to be transported in adequate salvage pressure receptacles. Furthermore, substances in defective non- pressure receptacles should also be allowed to be transported in salvage pressure receptacles provided that the compatibility of the material with the substance allows.”
3. In other words, salvage pressure receptacles should be permitted to transport not just gases or liquids of P200 Table 3, but solids and liquids in pressure receptacles packed in accordance with 4.1.3.6 or even in other packagings. Allowing such freedom would change the proposal from Germany considerably and would require that packers/consignors would have to make technical decisions rather than being guided by the approval certificate. However, this paper does not propose that salvage pressure receptacles should be used for packagings other than pressure receptacles since salvage packagings have proved appropriate in these cases.
4. It is the opinion of the expert from the United Kingdom that the cause of public safety would be best served by allowing expert operators of salvage pressure receptacles freedom to make their own risk assessments as to what can be transported safely and not restrict the use to gases only.
5. Salvage pressure receptacles are expensive and rarely used, since they are intended to be used only in the case of unforeseen emergencies. Because such events are unpredictable and may present unexpected hazards, their use is therefore always under the control of

knowledgeable experts who are able to make informed judgements as to the safe course of action.

6. Paragraph 4 of paper 2009/16/Rev.1 describes likely scenarios where the necessity for salvage pressure receptacles arises. There is another scenario which can occur and that is where an unintended contaminant in the gas or liquid has led to a reaction occurring with the material of the pressure receptacle. This is a known hazard with UN 1052 Hydrogen Fluoride, Anhydrous and this substance has a specific packing instruction (P200 (4) t:) stating:

- “(i) The wall thickness of the pressure receptacle shall be not less than 3 mm.
- (ii) Prior to transport it shall be ensured that the pressure has not risen due to potential hydrogen generation.”

If the pressure has risen or there is other evidence of corrosion of the pressure receptacle, it would be prudent to transport the pressure receptacle in a salvage pressure receptacle to ensure secure containment.

7. All of the possibilities described in paragraph 4 of paper 2009/16/Rev.1 and that described above are also feasible for other solids and liquids in pressure receptacles.

8. Accordingly, the suggestions below amend the text to allow for greater freedom of action by the packers/consignors of pressure receptacles in salvage pressure receptacles.

9. The 2009/16/Rev.1 paragraph 14 proposes that the approval certificate shall list the groups or divisions of gases authorized to be transported. Since these salvage pressure receptacles are made with the intention of transporting as many substances as possible, any permissive list would be very long or, by listing substances generically by their classification would risk including the few non-compatible substances. When transporting gases in pressure receptacles, there is no such permissive list and the consignor is required to establish compatibility by paragraphs 4.1.6.1.2 and 4.1.6.1.3 which also refer to 6.2.1.2. General provisions such as these should be sufficient for salvage pressure receptacles and suitable text is proposed below.

10. The second sentence of 4.1.1.17.6 has been deleted since it effectively repeats the requirement of the second sentence of 4.1.1.17.4. 4.1.1.17.6 (b) is based on 4.1.6.1.2.

Amended Proposal

11. Amend 4.1.1.17.6 to 4.1.1.17.8 as shown (new text in ***bold italics***).

4.1.1.17.6 A pressure receptacle may only be placed in a salvage pressure receptacle if:

- (a) authorized in the approval certificate;

(b) parts of the salvage pressure receptacle which are, or are likely to be, in direct contact with the dangerous goods shall not be affected or weakened by those dangerous goods and shall not cause a dangerous effect (e.g. catalyzing reaction or reacting with the dangerous goods); and

(c) when gas is transported and if the salvage pressure receptacle meets the requirements for pressure and tightness as laid down for the gas in packing instruction P 200 table 1 or 2. A pressure receptacle fully complying with the requirements and which is not damaged, defective or leaking should not be placed in a salvage pressure receptacle for transport.

4.1.1.17.7 If the gas dangerous goods in the damaged pressure receptacle is are classified as ~~division 2.1 or 2.3~~ flammable, toxic or corrosive, appropriate personal protective equipment shall be used during the packing and unpacking process.

4.1.1.17.8 All labels required for the gas dangerous goods inside the damaged pressure receptacle shall be applied to the salvage pressure receptacle for transport.

12. Amend the second paragraph of 6.2.3.5 as follows

In the approval certificate, the pressure receptacles and the group(s) or division(s) of gases authorized to be transported in a damaged pressure receptacle being placed in a salvage pressure receptacle shall be clearly indicated. A list of the materials of construction of all parts likely to be in contact with the dangerous goods shall also be included. A copy of the approval shall be delivered by the manufacturer to any user of a salvage pressure receptacle.

13. The last sentence of 6.2.3.5 refers to “ the maximum permissible pressure of pressure receptacles...”. Should this read “...the maximum permissible *test* pressure of pressure receptacles...”?
