



Secretariat

Distr.  
GENERAL

ST/SG/AC.10/C.3/2008/16  
2 April 2008

Original: ENGLISH

---

**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

Thirty-third session  
Geneva, 30 June-9 July (a.m.) 2008  
Item 4 of the provisional agenda

**LISTING, CLASSIFICATION AND PACKING**

Packing Instruction P200

Transmitted by the expert from Germany\*

**Background**

1. Subsection 4.1.4.1 Packing Instruction P200 in paragraph (4) has special packing provision “k” for valves for toxic substances with an LC<sub>50</sub> less than or equal to 200 ml/m<sup>3</sup> (ppm) and special packing provision “q” for valves for pyrophoric gases or flammable mixtures of gases containing more than 1 % of pyrophoric compounds. Such valves shall be fitted with gas-tight plugs or caps.
2. However, there are no requirements for gas tightness - neither in Packing Instruction P 200 nor elsewhere in the UN Model Regulations.
3. The very important aim of the required gas-tight plugs or caps is to safely close the cylinder in case the primary (first) closure by the cylinder valve fails thereby ensuring that the

---

\* In accordance with the programme of work of the Sub-Committee for 2007-2008 approved by the Committee at its third session (refer to ST/SG/AC.10/C.3/60 para. 100 and ST/SG/AC.10/C.3/34, para. 14)

very dangerous toxic or pyrophoric gases cannot escape. Therefore, the same tightness requirements as for the cylinder valves as the primary (first) closure of the cylinder should be adopted for the gas-tight plugs or caps respectively. For the respective cylinder valves according to ISO 10297:2006 (listed in clause 6.2.2.3) the leakage rate shall not exceed 6 cm<sup>3</sup>/h at different test pressures (0.1 bar, 10 bar and 1.2 times the working pressure) and different test temperatures (room temperature between +15 °C and +30 °C, +65 °C and -20/-40 °C).

## Proposals

4. Amend special packing provision “k” and “q” in paragraph (4) of P200 as given below.
5. Further on a consistent use of the word “gas-tight” (as given in special packing provision “q” and other places) within the UN Model Regulations should be achieved by changing “gas tight” to “gas-tight” in special packing provision “k” at the same time.
6. It is proposed to amend packing provision “k” to read as follows: (amended text is underlined):

“k Valve outlets shall be fitted with ~~gas-tight~~ gas-tight caps or plugs. Gas-tight caps or plugs shall meet the same requirements for their gas-tight closure as laid down in ISO 10297:2006 for tightness of the valve they are fitted to.”

Each cylinder within a bundle shall be fitted with an individual valve that shall be closed during transport. After filling, the manifold shall be evacuated, purged and plugged.

... (remainder unchanged)”.

Because the plugs or caps are fitted to the valve outlet a respective enhancement or amendment should be introduced in special packing provision “q” at the same time.

7. It is proposed to amend packing provision “q” to read as follows: (amended text is underlined):

“q The outlet of valves of pressure receptacles for pyrophoric gases or flammable mixtures of gases containing more than 1% of pyrophoric compounds shall be fitted with gas-tight plugs or caps. When these pressure receptacles are manifolded in a bundle, each of the pressure receptacles shall be fitted with an individual valve that shall be closed during transport, and the outlet of the manifold ~~outlet~~ valve shall be fitted with a gas-tight plug or cap. Gas-tight caps or plugs shall meet the same requirements for their gas-tight closure as laid down in the applied standard for tightness of the valve they are fitted to.”

---