

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

15 June 2010

Sub-Committee of Experts on the
Transport of Dangerous Goods

Thirty-seventh session

Geneva, 21–30 June 2010

Item 10 of the provisional agenda:

**Issues relating to the Globally Harmonized System of
Classification and Labelling of Chemicals (GHS)**

Sub-Committee of Experts on the Globally
Harmonized System of Classification
and Labelling of Chemicals

Nineteenth session

Geneva, 30 June–2 July 2010

Item 2 (a) of the provisional agenda:

**Updating of the third revised edition of the
Globally Harmonized System of Classification
and Labelling of Chemicals (GHS): Physical
hazards**

**Amendments to Chapter 2.5 of the GHS: Gases under
pressure**

Note by the secretariat

Introduction

1. The secretariat has received a request for clarification of the criteria for classification of gases under pressure in chapter 2.5.
2. According to the definition in 2.5.1, gases under pressure are gases which:
 - are contained in a receptacle at a pressure of 200 kPa (gauge) or more, or
 - are liquefied or liquefied and refrigerated.

Gases under pressure can be further sub-classified into four groups according to its physical state when packaged. The criteria for classification in one of the four groups (“compressed”, “liquefied”, “refrigerated liquefied” or “dissolved”) are given in table 2.5.2.

3. The classification criteria are summarized in decision logic 2.5. However, the text in the second box of the decision logic does not reproduce the criteria given in 2.5.1 for gases under pressure, but refers instead to the definition of gases in chapter 1.2, as follows:

(Gases are) Substances or mixtures:

- having a vapour pressure of more than 300 kPa (absolute) (at 50 °C) or
- being completely gaseous at 20°C and 101.3 kPa

4. This difference in the way in which the criteria are described in the definition in 2.5.1 and in the decision logic, seems to be confusing for some competent authorities, who have understood that the criteria in the second box of the decision logic was linked to the definition of gases under pressure.

5. It is the secretariat’s view that the criteria in the second box of the decision logic should be read in connection with the definition in 2.5.1, i.e: for compressed gases and dissolved gases, the gas should be considered under pressure only if the pressure inside the receptacle is of 200 kPa or more (gauge pressure). This pressure should be understood as a

pressure at 20°C (refer to paragraph 2.2.2.3 of the UN Model Regulations on the Transport of Dangerous Goods).

6. Recognizing, however, that the text of Chapter 2.5 can be improved and to avoid misunderstandings in the interpretation of the criteria, the secretariat after consultation of the European Industrial Gases Association (EIGA) as well as the Compressed Gas Association (CGA), proposes that:

- (a) the temperature at which the pressure has to be measured be specified in the definition of gases under pressure in 2.5.1;
- (b) the decision logic in 2.5.4.1 be amended to take account of:
 - the definition of “gases under pressure” in 2.5.1, and
 - the 200 kPa pressure criterion for compressed and dissolved gases

7. The proposed amendments are listed hereafter.

Proposal

8. Amend the definition in 2.5.1 as follows (inserted text is shown in bold, underlined):

“*Gases under pressure* are gases which are contained in a receptacle at a pressure of 200 kPa (gauge) or more **at 20°C**, or which are liquefied or liquefied and refrigerated”

9. Amend the introductory sentence in 2.5.2 to read as follows (inserted text is shown in bold, underlined):

“Gases **under pressure** are classified, according to their physical state when packaged, in one of four groups in the following table:”

10. Replace 2.5.4.1 with the following (inserted text is shown in bold, underlined):

2.5.4.1 Decision logic

Classification can be made according to decision logic 2.5.

Decision logic 2.5 for gases under pressure

