UNITED NATIONS



Distr. GENERAL

ST/SG/AC.10/C.3/2006/4 ST/SG/AC.10/C.4/2006/3 13 March 2006

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

<u>Harmonized System of Classification</u>

Sub-Committee of Experts on the Globally

and Labelling of Chemicals

Twenty-ninth session, 3-12(a.m.) July 2006 Item 3 of the provisional agenda

Eleventh session, 12(p.m.)-14 July 2006 Item 2 (a) of the provisional agenda

INTERNATIONAL HARMONISATION EXEMPTION PRESSURES

Proposal to harmonize the values in UN Recommendations, GHS and RID/ADR

Transmitted by the European Industrial Gases Association (EIGA)

Introduction

The UN Recommendations on the Transport of Dangerous Goods, Model Regulations, fourteenth revised edition, exempts in 2.2.2.3 - Gases of Division 2.2, other than refrigerated liquefied gases if they are transported at a pressure of less than 280kPa at 20 °C.

The Globally Harmonized System of Classification and Labelling of Chemicals (GHS), first revised edition, considers in 2.5.1 - Definition that Gases under pressure must have a pressure of more than 280kPa at 20 °C or be a refrigerated liquid.

The RID/ADR exempts from the provisions in 1.1.3.2.(c) gases of Groups A and O (Division 2.2), if the pressure of the gas in the receptacle or tank at a temperature of 15 °C does not exceed 200 kPa (gauge) and if the gas is completely in the gaseous state during carriage.

Discussion

- RID/ADR is more stringent in that it does not exempt the transportation of liquefied gases at low pressures. Effectively, a liquefied gas could be at 2 bar at 20 °C and reach 8 bar at 60 °C. Compressed gases would only rise marginally in pressure at higher temperatures. EIGA supports this philosophy.
- RID/ADR allows a marginally higher absolute pressure value 300 kPa (200 kPa gauge) at 15 °C instead of 280 kPa at 20 °C. EIGA feels that the difference is too small for arguing and is in favour of the 300 kPa because it is an easier figure to check with a gauge. On the other hand, one could adopt the 20 °C to bring it in line with the definition of gases elsewhere.
- The issue was raised whether 280kPa is not a gauge pressure. On investigation, the value came from CFR 49 provision 173.115 where it is explicitly stated "absolute pressure of 280 kPa (40 psia)". The UN on incorporating the value has omitted to convert to gauge pressure as required by 1.2.2.5 of the Model Regulations on the Transport of Dangerous Goods.

Proposal for the UN Model Regulations

Chapter 2.2

Amend 2.2.2.3 to read as follows:

"Gases of Division 2.2, other than refrigerated liquefied gases if they are transported at a pressure of less than $\frac{280}{200}$ kPa at 20 °C."

Proposal for the GHS

Chapter 1.2

In the definition of "Gas", insert the word "(absolute)" after "300 kPa".

Chapter 2.5

In 2.5.1 – Definition: Amend the first sentence to read:

"Gases under pressure must have a pressure of more than 280 **200** kPa (gauge) at 20 °C or be a refrigerated liquid. **liquefied.**"

In 2.5.4.1, Decision logic, 2nd box, in paragraph (a), replace "3 bar" by "300 kPa (absolute)".