COMMITTEE OF EXPERTS ON THE TRANSPORT
OF DANGEROUS GOODS
(Geneva, 4-13 December 2000,
agenda item 4)

GLOBAL HARMONISATION OF CLASSIFICATION AND LABELLING

JOINT ILO/COMMITTEE WORKING GROUP FOR THE HARMONISATION
OF CLASSIFICATION CRITERIA FOR PHYSICAL HAZARDS

Presented by the Chairman of the Working Group

During the meeting in Rome, 2 – 3 November 2000, the IOMC-Co-ordinating Group CG/HCCS agreed that the physical hazards gases present when enclosed e.g. in receptacles or tanks due to their physical state, should be included in the scope of the GHS to permit global harmonisation of criteria and labelling of such hazards. It was felt that these physical states and properties not only present hazards during transport, but also during storage and are relevant for worker and consumer protection also.

The IOMC-CG/HCCS addressed the Joint ILO/Committee Working Group to include proposals for the relevant definitions and criteria for the GHS to permit the ILO Working Group on Harmonisation of Hazard Communication to develop proposals for harmonisation of labelling of such properties.

Therefore the Chairman is proposing this issue to be addressed in the Joint ILO/Committee Working Group.

The Definitions of the different physical state of gases in the UN Recommendations (Model Regulation) currently are as follows:

11th revised edition:

2.2.1.2 The transport condition of a gas is described according to its physical state as:

(a) Compressed gas - a gas (other than in solution) which when packaged under pressure for transport is entirely gaseous at 20 °C

(b) Liquefied gas - a gas which when packaged for transport is partially liquid at 20 °C;

(c) Refrigerated liquefied gas - a gas which when packaged for transport is made partially liquid because of its low temperature; or
(d) Gas in solution - compressed gas which when packaged for transport is dissolved in a solvent.

In the first week the Committee discussed a proposal from the Working Group on Gases (ST/SG/AC.10/2000/22) and INF. 24:

2.2.1.2 The transport condition of a gas is described according to its physical state as:

(a) Compressed gas - a gas which when packaged under pressure for transport is entirely gaseous at –50 °C; this category includes all gases with a critical temperature below - 50 °C;

(b) Liquefied gas - a gas which when packaged under pressure for transport is partially liquid at temperatures above -50 °C. A distinction is made between:

High pressure liquefied gas - a gas with a critical temperature between –50 °C and +65 °C,

Low pressure liquefied gas - a gas with a critical temperature above +65 °C;

(c) Refrigerated liquefied gas - a gas which when packaged for transport is made partially liquid because of its low temperature; or

(d) Dissolved gas - a gas which when packaged under pressure for transport is dissolved in a liquid phase solvent.

Based on the decisions taken by the Committee during its session of last week, the Joint ILO/Committee Working Group is invited to discuss the issue and agree on a proposal for inclusion in the GHS.

The Working Group should discuss, whether these definitions and criteria – as developed for transport – are sufficiently covering the hazards of gases also for the other protection purposes of the GHS, namely worker protection, handling and use (including storage) and consumer protection.

As the GHS is not limited to transport, it is suggested the words “for transport” either not being included in the proposal for the GHS or being replaced by words like “when packaged in pressure vessels”, “when enclosed in receptacles and containers”.
Comparison of chapter 2.2.1.2:

<table>
<thead>
<tr>
<th>UN 11th revised edition</th>
<th>ST/SG/AC.10/2000/22 and INF. 24</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>The transport condition of a gas is described according to its physical state as:</td>
</tr>
<tr>
<td></td>
<td>The transport condition of a gas is described according to its physical state as:</td>
</tr>
<tr>
<td>(e) <strong>Compressed gas</strong> - a gas (other than in solution) which when packaged under pressure for transport is entirely gaseous at 20 °C</td>
<td>(a) <strong>Compressed gas</strong> - a gas which when packaged under pressure for transport is entirely gaseous at – 50 °C; this category includes all gases with a critical temperature below - 50 °C;</td>
</tr>
<tr>
<td></td>
<td>(b) <strong>Liquefied gas</strong> - a gas which when packaged under pressure for transport is partially liquid at 20 °C;</td>
</tr>
<tr>
<td></td>
<td>(b) <strong>Liquefied gas</strong> - a gas which when packaged under pressure for transport is partially liquid at temperatures above -50 °C. A distinction is made between:</td>
</tr>
<tr>
<td>(f) <strong>Liquefied gas</strong> - a gas which when packaged for transport is partially liquid at 20 °C;</td>
<td><strong>High pressure liquefied gas</strong> - a gas with a critical temperature between – 50 °C and +65 °C,</td>
</tr>
<tr>
<td></td>
<td><strong>Low pressure liquefied gas</strong> - a gas with a critical temperature above +65 °C;</td>
</tr>
<tr>
<td>(g) <strong>Refrigerated liquefied gas</strong> - a gas which when packaged for transport is made partially liquid because of its low temperature; or</td>
<td>(c) <strong>Refrigerated liquefied gas</strong> - a gas which when packaged for transport is made partially liquid because of its low temperature; or</td>
</tr>
<tr>
<td>(h) <strong>Gas in solution</strong> – compressed gas which when packaged for transport is dissolved in a solvent.</td>
<td>(d) <strong>Dissolved gas</strong> - a gas which when packaged under pressure for transport is dissolved in a liquid phase solvent.</td>
</tr>
</tbody>
</table>
Die Definitionen der verschiedenen Gaszustände in den UN-Empfehlungen

Author: W. Karl

Creation Date: 08/12/00 08.26
Change Number: 4
Last Saved On: 08/12/00 08.27
Last Saved By: UN/ECE
Total Editing Time: 1 Minute
Last Printed On: 08/12/00 14.30

As of Last Complete Printing
Number of Pages: 3
Number of Words: 743 (approx.)
Number of Characters: 4,240 (approx.)