

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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Discussion on the definition of Class 2, Division 2.2

Transmitted by the European Industrial Gases Association (EIGA)

Introduction

EIGA invites the Gases Working Group to consider the position of non-flammable, non-toxic gases transported at pressures below 280 kPa at 20 °C which are currently excluded from the Model Regulations.

This exclusion is not fully reflected in ADR and RID and this difference creates an impediment to free movement. EIGA would like to initiate a discussion to see if it might be possible to reach a consensus that could be adopted in all the international transport of dangerous goods regulations.

Background

All international transport of dangerous goods regulations have adopted the same definition of a gas, and its classification into compressed, liquefied, refrigerated and dissolved. Some non-flammable, non-toxic gases, however, although meeting the definition of a gas, are excluded from the UN Model Regulations. This exclusion is accomplished by means of the definition of Division 2.2 gases in the UN Model Regulations which excludes gases transported at a pressure of less than 280 kPa at 20 °C, provided that they are not refrigerated liquid.

The UN definition of Division 2.2 has been transposed into the international regulations for sea and air but has not been adopted by the ADR and RID. These regulations take a different approach by inserting a provision in Chapter 1.1 which excludes non-flammable, non-toxic gases only when transported at a pressure below 200 kPa (gauge) at 15 °C and completely in the gaseous state. That is, the liquefied gases remain regulated.

Clearly, this difference creates a barrier to free movement of those gases which may be transported completely unregulated by sea and air, but cannot be transported by land in Europe unless appropriate classification, packing and labelling requirements have been observed.

It may be argued that compressed gases at 280 kPa will only experience a modest increase in pressure as the temperature rises to 65 °C and therefore present a low risk. The same cannot be said for liquefied gases, particularly if the receptacle has been overfilled, a situation more likely when filling has not been controlled in accordance with the regulations. The hazards are also greater as the mass transported increases, a situation which cannot be addressed so long as the gases concerned are totally excluded by definition from the regulations.

Discussion points

EIGA asks that the Gases Working Group discuss the following questions with a view to establishing whether there is the possibility of a consensus which could be adopted in all the international regulations.

EIGA suggests the following discussion points:

- ?? Is there a safety case for regulating these low-pressure non-flammable, non-toxic gases?
 - ?? Is the present system of exclusion logical, or should the exclusion be elsewhere in the regulations, e.g. by means of an exclusion in Chapter 1.1?
 - ?? Should any such regulations be graduated according to
 - whether the gases are transported in packages or in bulk?
 - the physical state of the gases: compressed or liquefied?
 - ?? What sort of regulations should be applied?
 - Package/tank approval?
 - Packing instructions?
 - Placarding and labelling?
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