Introduction

EIGA totally supports the GHS and wishes to express its appreciation to all participating experts for the results achieved in this enormous and arduous task. There are however a number of areas where special consideration should be given to the specificity of gases and gas mixtures for industrial use. Amendments to fill in the gaps will need to be tabled and discussed. This Inf paper sets out to identify these in relation to the general introduction of the IOMC 2001/20. Further comments and suggestions will be made on other consolidated IOMC papers. Due to the lack of time, it will not be possible at this stage to come forward with elaborate proposals. EIGA hopes to submit these for the next July session.

Chapter 1.1: Intrinsic properties

Chapter 1.1 under 6 sets out the agreed principles of harmonisation and states that the hazard classification process refers only to the hazard arising from the intrinsic properties of chemical elements and mixtures thereof. Although EIGA can subscribe to the principle, it should be noted that there is some measure of inconsistency between the principle adopted and the subsequent classification of gases under pressure. Pressure is not an intrinsic property of gases as such. It is the way of packing; compressing, dissolving or refrigerating at low temperatures that confers a hazard. Industry is also shipping solids in molten state and liquids at high temperatures. These physical hazards can not and are not ignored.

To rectify this inconsistency, EIGA proposes an amendment to Chapter 1.1. para. 6, bullet point 2 as follows:

- the hazard classification process refers principally only to the hazards arising from the intrinsic properties of chemical elements and compounds, and mixtures thereof, whether natural or synthetic; however in some cases it is necessary to also take into account hazards arising from other properties, such as the physical state of the substance or mixture (e.g. pressure & temperature).

Chapter 1.2: Generic cut-off values

EIGA sees a major problem in the use of generic cut-off values as determined by the formula for toxic mixtures. As an example, a mixture of carbon monoxide with nitrogen could contain up to 75% of carbon monoxide and still not be toxic. One could argue that -Chapter1.2.29 -the classifier has information allowing for a derogation to use the formula. But this would jeopardise the principle of harmonisation. Some suppliers would use the formula; others would use their expert judgement. EIGA is in favour of allocating product specific values for gases.
Chapter 1.3: Labelling

A peculiarity of gases is that, except for bulk deliveries by tankers, the transport package is at the same time the use package. Labelling requirements for these receptacles should be as far as possible identical for transport and use.

Updating of information (23)

EIGA understands that an updating of new and significant information must be carried out promptly. However, this should only apply to the safety data sheet not to labels. Cylinders at customers are beyond the control of the supplier and it would be impracticable to change the labels on site.

Pictograms (36)

Since our packages are designed for both transport and use, EIGA appreciates that the UN RDTG pictogram can be used. From the reading, it was not very clear however that the additional GHS pictograms for certain hazards may also be applied also during transport.

Signal words (37)

EIGA does not believe that signal words add value for the type of packages the gas industry is using. The package, a cylinder, conveys a warning in itself. Gases, besides being under pressure can be flammable, oxidising, corrosive, toxic, carcinogenic, mutagenic, reprotoxic and combinations of these. This could lead to repetitive danger and/or warning signal words that would confuse the user. The package itself already carries hazard pictograms alerting to a danger. In transport, cylinders need to be labelled with the cylinder symbol simply to indicate that they do not have flammable or toxic properties. Otherwise, it would not make much sense to label a cylinder with a “cylinder pictogram”. EIGA proposes to adopt this philosophy where the pressure symbol is not required for flammable or toxic gases.

Hazard statements (38)

The use of hazard statements presents another big problem for cylinders. Ideally, they should appear on the label. The issue is how to accommodate six different hazard phrases in three different languages on a small size label without impairing readability. Also, not all hazard statements are applicable all the time at any place. It is difficult if not impossible for a supplier to know the conditions under which a cylinder will be used at the workplace. The employer who controls the workplace where the gas is used must make a risk assessment with the help of the safety data sheet supplied. The employer is responsible for providing appropriate protective measures and for conveying information to employees by training and warning signs or phrases.

Product identifier (42)

In addition to supplying approximately 150 pure gases, the members of EIGA also manufacture a vast range of gas mixtures. Such mixtures may contain almost any concentrations of all or any of the pure gases and, in some cases, vapours of certain liquids. The only limitations are that such gases and vapours are safe to mix and that the resultant mixtures are technically feasible and stable. Gas mixtures are often made to customers’ individual specifications and hence, the range of potential mixtures is almost infinite. It would not be practical to indicate all the ingredients on the label. Again, EIGA would like to stress the importance of safety data sheets to convey precise and complete information. Leaving the decision to the individual competent authorities does not foster harmonisation.
**Precedence for the allocation of symbols (46)**

Gases can have either a systemic toxic effect, a corrosive (destruction of living tissue) effect or both. It is clear that since «corrosive» gases are water soluble (which lends them their corrosive properties) they are automatically aquatic toxics also. It does not make much sense for gases that are already labelled with skulls and bones and corrosivity symbols to add the dead fish and tree or exclamation mark. EIGA proposes to add the following principle:

- If both skull and crossbones and corrosive symbols apply, neither the dead fish and tree nor the exclamation mark should appear where this is used for aquatic toxicity.

**Special labelling arrangements (53)**

For the sake of harmonisation, EIGA prefers to communicate the hazards of carcinogenicity or reprotoxicity on the safety data sheet (not on the label) and not leave this decision to the competent authority.

**Workplace labelling (55)**

EIGA supports the use of alternative means of giving workers the information in a different format but not subject to the approval of the competent authority.

**Chapter 1.4: Safety Data sheets**

The requirement to give the recommended use and restrictions on use is in contradiction with § 2 where it states that “The SDS is product related and, usually, is not able to provide specific information that is relevant for any given workplace where the product may finally be used,...”. Gases have a nearly infinite number of uses, all of which can be most important or common. Oxygen can be a medicinal gas, a food gas or an oxidizing gas for cutting, brazing, welding etc. The tailor made mixtures have an unknown use. If special applications are being considered, the user is prompted to ask for guidance from the supplier.