

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 Globally Harmonized System of Classification and Labelling of Chemicals

Eighth session, 7-9 December 2004
Item 3 (a) of the provisional agenda

DEVELOPMENT OF GUIDANCE FOR IMPLEMENTATION

Precautionary Statements (PS)

Transmitted by the European Industrial Gases Association (EIGA)

INTRODUCTION

At its fourth session in December 2002, the Sub-Committee decided to set up a Correspondence Group on Precautionary Statements (ST/SG/AC.10/C.4/8, para. 27), the objective of which would be to derive advice on how to avoid hazards indicated by GHS hazard statements or to respond to incidents.

At the July 2004 session, the participants in plenary were asked to send their comments to the Correspondence Group in time. EIGA proposed some modifications but apparently these comments do not appear to have been taken into account in ST/SG/AC.10/C.4/2004/8/Rev.1 of September 24th. Therefore, EIGA is resubmitting the proposed modifications.

GASES VERSUS LIQUIDS AND SOLIDS

It is advisable to limit and streamline the various precautionary statements. However, it has to be considered that gases are quite different from liquids or solids. There are two main differences:

Exposure. Liquids or solids are used at atmospheric pressure. Workers may come into contact with them when using/transfilling them. Gases are contained under pressure in gastight receptacles or tanks. Workers are not exposed to the gases except in case of leak or emergencies.

Label space. Gas cylinders are labeled on the shoulder to avoid damage during transport and to retain visibility. The space on the so-called banana labels is extremely limited, just a few square centimeters. Gases have nearly all the hazards of the transport classes and additionally CMR and environment effects. In combination, this could lead to 4 hazard statements and 6 precautionary. In a country with three languages such as Belgium, 30 phrases would have to be printed on the label. For South Africa with 9 languages, this would mean 90 phrases. EIGA wants to save on any word that does not add value and wants to combine where possible.

PRECAUTIONARY STATEMENTS

Precautionary statements do not replace a full Safety Data Sheet and should only signal precautions that can be understood by everybody. Increasing the number of phrases easily leads to “fatigue” for the reader and the important messages not getting full consideration.

FLAMMABLE GASES (CHAPTER 2.2) – PREVENTION**(a) “Keep away from ignition sources such as heat/sparks/open flame. - No smoking.”**

Both storage and use of flammable gases are already covered by specific legislation (e.g. ATEX Directive in Europe) and/or standards (e.g. NFPA). During use, flammable gases such as acetylene or LPG will have to be ignited. The meaning of a precautionary statement such as “Keep away from ignition sources” is for storage purposes only and covers the emergency situation of a leak. This precautionary statement is less important than the recommended phrase for storage “*Store in well-ventilated place*”.

If and when we are to keep the prevention phrase, no examples should be included. There are 13 different sources of ignition. Listing them all makes no sense; giving examples such as heat, sparks and flames do not add value to the message. The word heat is not defined and EIGA objects to its use. Smoking is an ignition source in itself. EIGA therefore proposes either to delete this phrase or state: “*Keep away from ignition sources*”

The other phrase “*Store in well-ventilated place*” is the most important one and covers the hazard of ignitions as well.

(b) “Use explosion-proof electrical / ventilating / lighting / ... equipment”, "Take precautionary measures against static discharge" and "Use only non-sparking tools"

All flammable gases are as volatile as to generate a hazardous atmosphere but this is not in the conditions of normal handling and use; these are accidents. Hazardous atmospheres where humans can be present are not deliberate. The prevention statements do not apply everywhere nor at any time. This is covered by specific legislation (ATEX equipment, building codes) which is very detailed and requires risk assessment studies. EIGA cannot see the millions of households using LPG cylinders or camping gas canisters have at their disposal Ampcolloy wrenches and ATEX equipment in their kitchen or camping car nor ground this kind of receptacles. These statements would confuse the users and shall therefore be *deleted*.

GASES UNDER PRESSURE (CHAPTER 2.5) Refrigerated liquefied**(a) “Wear cold insulating gloves / face shield / eye protection when operating pressure equipment”**

The term operating pressure equipment is misleading. Refrigerated liquefied gases are for example handled in open dewars with no pressure. The prevention statement should be changed to: “*Wear insulating gloves / face shield / eye protection.*”

(b) “If on skin or clothes: Rinse immediately contaminated clothes and skin with plenty of water before removing clothes”

This is totally wrong. This practice applies to hot burns not to cryogenic burns. The water will freeze on the clothes. Contaminated clothing must be immediately removed in the case of liquid hydrogen or liquid oxygen because of the fire risk. EIGA proposes to delete this statement.

(c) “Protect from sunlight and store in well-ventilated place”

The storage phrase “protect from sunlight” is not inspired by a safety concern. Liquid hydrogen e.g. is at a temperature of -252°C and whether the delta at normal temperature is 272°C or 300°C at sunlight temperature, the container has to be designed for it. In time, all containers of refrigerated liquid gases will build up pressure but this does not warrant an obligation to protect from sunlight. EIGA proposes to keep the statement: “*store in well-ventilated place*”.
