How to interpret signs and words on Chemical Labels

Reading the label on containers is the first step in getting health and safety information on the chemicals used in your workplace. It is important to recognise symbols and read labels so that you can take steps to protect your health:

**Hazardous label**

Some containers have the signal word “Hazardous” or “Classified as Hazardous according to NOHSC Criteria”. This indicates the product has been classified as a hazardous substance by the supplier in accordance with NOHSC’s Approved Criteria for Classifying Hazardous Substances [NOHSC:1008(2004)].

The risk and safety phrases on the label will give more detail as to the nature of the hazard.

**Risk Phrases**

Risk phrases convey a general description of the physicochemical, environmental and health hazards of a substance. They can also be written as an alpha-numeric classification number, for example R25 refers to “Toxic if swallowed”.

For a complete list and description of the Risk phrases click on the following link: http://www.ascc.gov.au/applications/hsis/risk_phrases.htm

**Safety Phrases**

Safety phrases provide information on safe storage, handling, disposal, personal protection and first aid. They can also be written as an alphanumeric classification number, for example S8 refers to “Keep container dry”.

For a complete list and description of the Safety phrases click on the following link: http://www.ascc.gov.au/applications/hsis/risk_phrases.htm

**Symbols for Dangerous Goods**

Dangerous Goods Class is a numerical classification based on the most significant risk associated with the product. Subsidiary and Tertiary are additional risk associated with the product.

The “diamond” sign on the label shows to which of the nine classes the dangerous goods belong. This has a distinctive symbol and colour as detailed over the page.

In addition, some labels also show the Packing Group (abbreviated as PG), which indicates the degree of danger:
- PG I - great danger,
- PG II - medium danger,
- PG III - minor danger.
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1. EXPLOSIVES
2.1 FLAMMABLE GASES
2.2 NON-FLAMMABLE NON-TOXIC GASES
2.2 OXIDIZING GAS
2.3 TOXIC GASES
3. FLAMMABLE LIQUIDS
4.1 FLAMMABLE SOLIDS (and other reactive substances)
4.2 SUBSTANCES LIABLE TO SPONTANEOUS COMBUSTION
4.3 SUBSTANCES THAT IN CONTACT WITH WATER EMIT FLAMMABLE GASES
5.1 OXIDIZING SUBSTANCES
5.2 ORGANIC PEROXIDES
6.1 TOXIC SUBSTANCES
6.2 INFECTIOUS SUBSTANCES
7. RADIOACTIVE MATERIAL (CATEGORY I)
7. RADIOACTIVE MATERIAL (CATEGORY II or III)
8. CORROSIVE SUBSTANCES
9. MISCELLANEOUS DANGEROUS GOODS AND ARTICLES
   MIXED CLASS LABEL FOR ROAD AND RAIL TRANSPORT
   SUBSIDIARY RISK LABEL TO BE USED WITH ELEVATED TEMPERATURE SUBSTANCES