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Environment, Health and Safety Committee Note on: Classification Labelling and Packaging – The New Hazard Labelling System For Chemicals

If you have bought chemicals since December 2010, then you may well have noticed a change to the hazard labelling. For example, white spirit, sold in DIY stores has lost its familiar "**X**" pictogram indicating harmful and now has: four new pictograms; the word Danger, Hazard Statements and Precautionary Statements. The point to note is that the white spirit in the bottle is no more dangerous now than it was before December 2010 even though the label has changed.

Background

The Classification Labelling and Packaging Regulation (CLP) EC1272/2008 came into force throughout the EU on 20 January 2009.This regulation had its origins at the UN Conference in Johannesburg in 2004 in response to the need to standardise information for the trans-border movement of chemicals. Its aim was to facilitate trade and better protection for health and the environment. It represents internationally agreed criteria developed by the UN Economic and Social Council (UN ECOSOC) for the Classification & Labelling of Hazardous Substances and Mixtures which is also known as the Globally Harmonised System (GHS) of Classification and Labelling of Chemicals.

The CLP regulation of 2008 replaces the Dangerous Substances Directive (DSD) and will replace the Dangerous Preparations Directive (DPD) in 2015. The Regulation applies EU wide and there is a requirement to provide a safety data sheet to communicate how to use chemicals safely. It applies to manufacturers, importers, downstream users (formulators), distributors and retailers. Since 1 December 2010 substances have had to comply with CLP and this will be extended to mixtures by 1June 2015. After 1 June 2015, the labelling of all substances and mixtures must be CLP compliant. However, in practice, the new regulation makes provision for 'old' and the 'new' classification systems to run in parallel for a further two years.

What's new?

Although the intention is to create a single system of substance and mixture labelling, this will be phased in over the next five years. Under the new system label will comprise:

1. New Pictogram (s)
2. Signal Word (Danger/Warning)
3. Product identifier
4. Contact details of the supplier
5. Amount /Quantity
6. Hazard Statement (s)
7. Precautionary Statement (s)
8. Additional Information/Supplementary information

The new symbols comprise nine pictograms (GHS 01-09) End-on Square with Red Border and a black symbol. Many look similar to the old symbols although they may cover a different range of hazards. There are three completely new symbols. The symbol **X** (harmful/irritant) is no longer used.

- GHS01 replaces explosive
- GHS02 replaces flammable
- GHS03 replaces oxidising substances
- GHS04 NEW Gases under pressure will display this symbol.
- GHS05 replaces corrosive

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- GHS06 replaces toxic

GHS01 GHS02 GHS03 GHS04 GHS05 GHS06 GHS07 GHS08 GHS09

- GHS07 NEW Indicates some chemicals formerly classified as HARMFUL or IRRITANT (**X**) and includes skin sensitising chemicals as well as high hazard and may cause damage to genetic material, be CMRs(carcinogens, mutagens and reproductive toxicants) or aspiratory hazards (related to breathing) and may target specific organs. This symbol also applies to substances that target specific organs
- GHS08 NEW Indicates damage to genetic material: mutagens, carcinogens, sensitisers, aspiratory hazard and some high hazard substances that target specific organs.
- GHS09 replaces hazardous to aquatic environment.

Each pictogram is usually associated with a Signal Word, a Hazard Statement and a Precautionary Statement.

Signal Word

The Signal Word alerts the user to the severity of the hazard.
Danger indicates more severe hazards.
Warning indicates less severe hazards.
No signal word indicates low hazard although there may still be hazard statements.

Hazard Statements

Hazard Statement (s) (H) replace the old DSD/DPD risk phrases (R) and describes the nature, severity and category of the substance or mixture. Hazard Statements are assigned to a hazard class and hazard category.

- Hazard Class: describes the nature of the physical (fire, corrosion)/health/or environmental hazard.
- Hazard category: Criteria within each hazard class that specifies hazard severity.

For example H373: May cause damage to organs through prolonged or repeated exposure. It describes the nature of a hazardous substance or mixture including where appropriate the degree of hazard. In addition, the EU has introduced some supplementary statements, prefixed EUH, e.g., EUH066: “Repeated exposure may cause skin dryness or cracking”.

Precautionary Statements

Precautionary Statements (P) replace the old safety phrases (S) and describe the recommended measures to minimise or prevent exposure, to substances and mixtures during use and disposal. For example, P280: Wear protective gloves/protective clothing/eye protection/face protection. P statements provide important information for conducting risk assessments and putting risk management measures in place.

Some Issues with the New Labelling System

As the new labelling system is implemented there are likely to be several issues that may cause confusion. Firstly, there is likely to be some confusion over the new symbols themselves which do not map directly on/to the symbols that they replace. In particular, the replacement of the irritant symbol (**X**) with GHS07 (**!**) and the associated Signal Word "Danger". This may lead to some people incorrectly assuming that the substances or mixtures they are using are now more dangerous. This is likely to be compounded by inconsistencies in product labelling by manufacturers and suppliers. The possibility exists that, instead of having an agreed set of Hazard and Precautionary Statements for each substance/mixture, different manufacturers and suppliers could assign different Precautionary Phrases to the same substance/mixture.

Note was prepared by a Working Party of the RSC Environment, Health and Safety Committee.

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