Classification Packaging and Labelling

Classification, Packaging and Labelling (CPL) legislation aims to protect people and the environment from the effects of dangerous chemicals by requiring suppliers to provide information about the dangers and to package them safely.

The suppliers must identify the hazards and classify the chemical accordingly. In addition they need to communicate these hazards to the user on the label and through provision of a safety data sheet.

Two pieces of legislation and their amendments currently outline the CPL requirements:

- The European Communities (Classification, Packaging, Labelling and Notification of Dangerous Substances) Regulations, 2003
- The European Communities (Classification, Packaging Labelling and Notification of Dangerous Preparations) Regulations, 2004

Classification of Dangerous Chemicals

What substances and preparations are considered dangerous in accordance with the CPL Regulations?

The classification of a substance or preparations as dangerous is based on an evaluation of the hazards associated with it. The hazards are due to the intrinsic properties of the chemical. These intrinsic properties are based on knowledge of the toxicological, physiochemical and eco-toxicological properties of the chemical. The substance is classified for the appropriate endpoint based on criteria outlined in Schedule 5 of the CPL substances Regulations and Schedule 1, 2 & 3 of the CPL Preparations Regulations. These hazards are then communicated via a hazard label and Safety Data Sheet (SDS).

How are dangerous substances and preparations classified?

In accordance with the classification requirements of the above regulations, a dangerous substance or preparation must be classified as one or more of the following:

**Physical Properties:**

- Explosive
- Oxidising
- Extremely flammable
- Highly flammable
- Flammable
Toxicological Effects:

- Very toxic
- Toxic
- Harmful
- Corrosive
- Irritant
- Sensitising

Specific Effects on Human Health:

- Carcinogenic
- Mutagenic
- Toxic for reproduction

Environmental Effects:

- Dangerous for the environment

Hazard Labels

What is a Hazard Label?

All substances or preparations that are classified as dangerous under the CPL Regulations require a hazard label. This is usually the first indication of a product's danger.

What does a hazard label contain?

The ‘hazard label’ must display information about the physiochemical, health and environmental hazards of the product. These dangers are illustrated by the use of hazard symbols and their indications of danger along with risk phrases (which describe the hazard in greater detail) and safety phrases (which give appropriate handling advice to control the hazard). The hazard label should also contain the name, address and phone number of the manufacturer or supplier. An emergency phone number should also be listed if the other number listed is not available outside working hours.

What additional information is required on the hazard label?

A package containing a dangerous substance or preparation may also require tactile warning devices and child resistant fastening as outlined in Schedule 7 of the CPL Subs Regs. The identification of a product on the label such as a trade name, chemical name etc. must be identical to that listed in Section 1 of the Safety Data Sheet. The classification of the product i.e. its symbols, indication of danger, risk and safety phrases must be the same as those listed in Section 15 of the SDS.
What size must hazard labels be?

Each symbol must cover at least one-tenth of the surface area of the label, but not be less than one square centimetre (1 cm$^2$), and the entire surface of the label shall adhere to the package immediately containing the substance.

The dimensions of such a label shall be as follows:

<table>
<thead>
<tr>
<th>Capacity of the package (millimetres)</th>
<th>Dimensions (millimetres)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not exceeding 3 litres</td>
<td>if possible, at least 52 x 74</td>
</tr>
<tr>
<td>Greater than 3 litres but not exceeding 50 litres</td>
<td>at least 74 x 105</td>
</tr>
<tr>
<td>Greater than 50 litres but not exceeding 500 litres</td>
<td>at least 105 x 148</td>
</tr>
<tr>
<td>Greater than 500 litres</td>
<td>at least 148 x 210</td>
</tr>
</tbody>
</table>

What are the packaging requirements for dangerous substances and preparations?

A dangerous substance or preparation to which these Regulations apply shall not be placed on the market unless its packaging satisfies the following requirements:

- It is so designed and constructed that its contents cannot escape
- The materials constituting the packaging and fastening are not susceptible to adverse attack by the contents, or liable to form dangerous compounds with the contents
- The packaging and fastenings are sufficiently strong and solid throughout to ensure that they will not loosen and will safely meet the normal stresses and strains of handling
- Containers fitted with replaceable fastening devices can be repeatedly refastened without the contents escaping
- Containers, containing dangerous substances which are offered or sold to the general public, and which are labelled "very toxic", "toxic" or "corrosive" must have a child resistant fastening and bear a tactile warning of danger (see FAQ above)
- Containers, containing dangerous substances which are offered or sold to the general public, and which are labelled "harmful", "extremely flammable" or "highly flammable" must bear a tactile warning of danger (see FAQ above)
- A container which contains a preparation and which is offered or sold to the general public must not have a shape and graphic decoration, or either of them, that is likely to attract or arouse the active curiosity of children or to mislead consumers, nor can it have a presentation and a designation, or either of them, that is used for foodstuffs or animal feeding stuffs, medical products or cosmetic products.