In accordance with the REACH Regulation (Regulation (EC) No. 1907/2006), a safety data sheet (SDS) should be supplied with any hazardous chemical. Safety data sheets (SDSs) provide useful information on chemicals, describing the hazards the chemical presents, and giving information on handling, storage and emergency measures in case of an accident. SDSs may include further information on safe handling, in the form of exposure scenarios. REACH requires users of hazardous chemicals to follow the advice on risk management measures given in the exposure scenario, where provided.

The Safety Data Sheet must contain the following 16 headings:

1. Identification of the substance/mixture and of the company/undertaking
2. Hazards identification
3. Composition/information on ingredients
4. First aid measures
5. Fire-fighting measures
6. Accidental release measures
7. Handling and storage
8. Exposure controls/personal protection
9. Physical and chemical properties
10. Stability and reactivity
11. Toxicological information
12. Ecological information
13. Disposal considerations
14. Transport information
15. Regulatory information
16. Other information

Safety Data Sheets must be provided for:

- chemicals classified as hazardous in accordance with Regulation (EC) No 1272/2008 on the classification, labelling and packaging of substances and mixtures (CLP);
- substances meeting the criteria as persistent, bio-accumulative and toxic (PBT) or very persistent very bio-accumulative (vPvB) to the environment in accordance with REACH;
- substances which appear on ECHA’s Candidate List of substances of very high concern (SVHC) for a reason other than either of the two points above; and
- mixtures (upon request of the downstream user/distributor) which themselves are not classified under CLP but which contain at least one substance that is:
  - classified as hazardous to health or the environment above concentration limits set out in Article 31(3) of REACH;
  - a PBT or vPvB at a concentration ≥0.1% w/w;
  - on the Candidate List of SVHCs at a concentration ≥0.1% w/w for a reason other than either of the two points above; and
  - assigned an EU limit value for exposure at the workplace (OELV).

A Safety Data Sheet must be:

- prepared by a competent person,
- in an official language(s) of the Member State where the chemical is being placed on the market,
- in the required 16 heading format,
- specific to the chemical,
- clear and understandable,
- provided free of charge, either on paper or electronically,
- provided no later than at the time of receipt of the first delivery, including online deliveries,
- updated when new information on the chemical becomes available or when an authorisation is granted or refused, or a relevant restriction is imposed under REACH,
- provided to everyone who has received the chemical during the previous 12 months upon update or revision, and
- dated and the pages numbered.
What information should be taken account of in a Safety Data Sheet?

There is an obligation on users of chemicals to take measures to protect both humans, and the environment, from any hazards associated with the chemicals. Therefore, it is important that the information provided in the safety data sheet is taken into account and used to prepare a chemical risk assessment for the workplace. Information on chemicals in the workplace must be provided to all employees and the SDS is a useful tool in communicating the hazards of these chemicals and the measures of protection to be taken when using them.

Each section of the SDS contains specific information relating to the chemical.

Section 1 contains contact details of the person/company responsible for supplying the chemical, the uses of the chemical, as well as the telephone number to contact in case of an emergency (see details on page four of this information sheet).

Section 2 gives details on the hazards of the chemical and the potential effects and symptoms resulting from use. This will help in the assessment of the risks to health, the health of workers and the environment. All hazardous substances and mixtures must be classified and labelled according to the CLP Regulation. Therefore, pictograms, the signal word, hazard and precautionary statements must appear in this section. The information in this section must be consistent with the information on the label.

Section 3 This section provides information on the identity, hazards and concentration of individual substances in a mixture. In the case of an SDS for a substance, this section provides the identity of the substance.

Section 4 describes the necessary first aid measures to be taken in case of an accident.

Section 5 gives specific information on fighting a fire caused by the chemical, including the most suitable extinguishing media and protective equipment.
Section 6 describes what actions need to be taken if there is an accidental release of the chemical.

Section 7 contains details on how to handle and store the chemical safely.

Section 8 gives details of the steps needed to reduce exposure, for example ventilation and personal protective equipment (PPE) necessary to protect health, as well as occupational exposure limit (OEL) values where required.

Sections 9, 11 and 12 provide detailed information on the physical/chemical, toxicological and ecological properties of the chemical.

Section 10 contains details of any hazardous reactions that may occur if the chemical is used under certain conditions.

Section 13 explains how the chemical should be disposed of correctly.

Section 14 contains information relating to the transportation of the chemical.

Section 15 contains information relating to the transportation of the chemical.

Section 16 gives any other information relevant to the chemical for example training advice or full text of hazard statements.

In addition, SDSs for substances or for mixtures containing substances that have been registered under REACH are required to include:

- Registration numbers where appropriate
- Exposure Scenarios including any risk management measures required, in an Annex to the SDS for hazardous substances registered at >10 tonnes/year.

What should be done when a Safety Data Sheet is received?

☐ Ensure that there are 16 headings
☐ Check that it is in English and is clear and concise
☐ Check that it is dated and any revision date and details of revisions are provided
☐ Ensure that the details on the chemical's label are exactly as given in section 2 of the SDS
☐ Contact the supplier and request an updated version if not satisfied with the information provided
☐ Use the information to prepare chemical risk assessments, inform employees of the hazards of the chemical, the protective measures to be taken when using it and the measures to be taken in an emergency
☐ Store the SDS, either as a hard copy or electronically, in a place that is known to, and accessible to, all employees
☐ It is advisable to keep a chemical inventory of all chemicals on site and SDSs are a useful tool in helping to keep account of all substances in the workplace
☐ It is also good practice to regularly check the SDSs to ensure that multiple or out-of-date copies are not being stored
☐ If there is an Exposure Scenario annexed to the SDS, ensure the risk management measures relevant to the use of the substance are in place.
Tips for formulators who prepare and supply SDSs to their customers

- Ensure that the SDS is in compliance with Annex II of the REACH Regulation.
- Ensure that the person responsible for compiling the SDS is competent, that is, that they have the relevant experience, knowledge and training.
- Provide the e-mail details of the competent person in section 1, along with the company’s address and telephone number and the emergency number.
- Ensure that the SDS is specific to the chemical being supplied and not generic.
- Ensure that the recipient of the chemical receives a SDS for that chemical free of charge, on paper or electronically, no later than at its time of delivery.
- Where a mixture is not classified itself but contains hazardous substances, ensure a SDS is supplied upon request to downstream users or/ distributors.
- Update the SDS without delay with any new information on the chemical.
- Remember that the classification provided on the label of the chemical must be identical to that given in section 2 of the SDS.

What emergency number should be provided in section 1.4?

For any mixture classified as hazardous on the basis of its health and/or physical effects and placed on the Irish market, it is obligatory for importers and formulators to include the National Poisons Information Centre (NPIC) emergency number in section 1.4. The NPIC emergency number cannot be used in Section 1.4 of an SDS until the notification process is complete. The notification process is explained on the NPIC website http://www.poisons.ie/Manufacturers/Product-Registration.

When placing chemical products on the market in other EU Member States, the respective national poison centre number, where established, is required to be included in Section 1.4 of the SDS. Further information is available on the ECHA website under the National Helpdesk contact details.

For mixtures which are not classified as hazardous (but do require a SDS based on the presence of hazardous ingredients), mixtures which are classified for environmental hazards only and for substances, reference to an emergency service belonging to the supplier himself or to a competent third party provider of such a service must be made.

Where the supplier provides his own emergency information service, be it alone or in combination with an official advisory body or other provider, the necessary competence should be available.

Any limitations on the official advisory body, the supplier’s own, or any third party’s services (opening hours or types of information that can be provided) must be indicated.

Further information

The chemicals pages on the Health and Safety Authority’s website: http://www.hsa.ie/eng/Your_Industry/Chemicals/Legislation_Enforcement/REACH/Safety_Data_Sheets/

Hazard labelling and packaging according to the CLP Regulation Information sheet on the HSA website: http://www.hsa.ie/eng/Publications_and_Forms/Publications/Chemical_and_Hazardous_Substances/

Contact our chemicals helpdesk with any questions on 1890 289 389 or email chemicals@hsa.ie


Further Information and Guidance:

Visit our website at www.hsa.ie, telephone our contact centre on 1890 289 389 or email wcu@hsa.ie

Use BeSMART, our free online risk assessment tool at www.besmart.ie

Check out our range of free online courses at www.hsalearning.ie