

Safety Data Sheets for Hazardous Chemicals Information Sheet

Updated Sept 2018

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. Over the coming years, 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 | 6. Accidental release measures | 12. Ecological information |
| 2. Hazards identification | 7. Handling and storage | 13. Disposal considerations |
| 3. Composition/information on ingredients | 8. Exposure controls/personal protection | 14. Transport information |
| 4. First aid measures | 9. Physical and chemical properties | 15. Regulatory information |
| 5. Fire-fighting measures | 10. Stability and reactivity | 16. Other information |
| | 11. Toxicological 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
- 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 $\geq 0.1\%$ w/w;
 - on the Candidate List of SVHCs at a concentration $\geq 0.1\%$ w/w for a reason other than either of the two points above;
 - 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 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 first delivery
- 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
- Dated and the pages numbered.



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 Section 8 gives details of the steps needed to reduce exposure, e.g. 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 details on relevant EU/national legislation.

Section 16 gives any other information relevant to the chemical e.g. training advice, full text of hazard statements etc.

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.

6. Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures
Remove all ignition sources. Provide for sufficient ventilation/respiratory protection. Avoid dust prevention eye contact.

6.2 Environmental Precautions
Prevent entry into drains, sewers, water courses. To prevent release, place container with damaged side up.

6.3 Methods and materials for containment and cleaning up
Wear necessary protective equipment. Stop leak if possible without risk. Sweep thoroughly after dealing with a spillage. Wash in accordance with local or national regulations. Flush area clean with lots of water. Be aware of

6.4 Reference to other sections

7. Handling and Storage

7.1 Precautions for safe handling
Avoid spraying, skin and eye contact. Institute containment measures, local and general ventilation, measures to prevent

7.2 Conditions for safe storage, including any incompatibilities
Store in a cool, dry, well-ventilated area. Keep in original container. Check for

7.3 Specific end uses

8. Exposure Controls/Personal Protection

8.1 Control Parameters

Exposure limit values
OEL: 10 mg/m³
 OEL: 10 mg/m³

8.2 Exposure controls
Occupational exposure controls
 Respiratory Equipment
 CE: EN 123
 Hand Protection
 Wear gloves. Gloves should be used if there is a risk of direct contact or splash. Use protective gloves made of Rubber
 Eye Protection
 Wear eye protection. Use safety goggles CE: EN standard
 Other Protection
 Wear necessary protective equipment to prevent any possibility of skin contact. Provide eyewash station.
 Hygiene Measures
 Wash hands at the end of each work shift and before eating, drinking and using the toilet. Wash promptly if skin becomes wet or
 Environmental exposure control
 Use closed systems or good work practices to reduce exposure within OEL's where necessary.

9. Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

APPEARANCE: Liquid
CLOUR: Colourless
ODOUR: Odourless
SOLUBILITY: Soluble in water. Miscible with water.
BOILING POINT (°C): 110
MELTING POINT (°C): 10
RELATIVE DENSITY APPROX. (20 °C): 1.200 @ 20 °C
pH: 10
9.2 Other Information: Other important safety parameters

10. Stability and Reactivity

10.1 Reactivity:
No reactions.

10.2 Chemical Stability:
Stable under normal temperature conditions.

10.3 Possibility of hazardous reactions:
No hazardous reactions.

10.4 Conditions to avoid
Avoid contact with acids. Reacts strongly with concentrated acids and strong oxidising agents.

10.5 Incompatible materials

10.6 Hazardous decomposition products:

Page 2 of 3

11. Toxicological Information

11.1 Information on toxicological effects

Acute toxicity: Irritant
Acute toxicity: Irritant. Contact may cause effects ranging from moderate eye irritation to severe chemical

Serious eye damage irritation: Irritant
Serious eye damage irritation: Irritant. Contact may cause effects ranging from moderate eye irritation to severe chemical

Skin corrosion/irritation: Irritant
Skin corrosion/irritation: Irritant. Contact may cause effects ranging from moderate eye irritation to severe chemical

Respiratory or skin sensitisation: Irritant
Respiratory or skin sensitisation: Irritant. Contact may cause effects ranging from moderate eye irritation to severe chemical

STOT single exposure: May irritate the throat and respiratory tract. Coughing, sneezing, and shortness of breath may

STOT repeated exposure: May cause irritation.

Carcinogenicity: A causal association has not been established.

Germ Cell Mutagenicity: No testing required.

Reproductive toxicity: No testing required.

Aspiration hazard: Some individuals may exhibit infant contact dermatitis.

12. Ecological Information

12.1 Toxicity
Designated for the environment if discharged into watercourses. The product is not expected to be hazardous to waste

12.2 Persistence and degradability
Not persistent. No results of degradability.

12.3 Bio accumulative potential
No bioaccumulative potential.

12.4 Mobility in soil
No mobility in soil.

12.5 Results of PBT and vPvB assessment
Not PBT/vPvB.

12.6 Other adverse effects

13. Disposal Considerations

13.1 Waste Treatment methods
See product label for disposal instructions. Dispose in accordance with local authority requirements. Recover and reclaim or recycle, if

14. Transport Information

14.1 UN number: 2345
14.2 UN Proper shipping name: ABC XYZ
14.3 Transport Hazard Class(es): 2345
14.4 Packing group: III
14.5 Environmental hazards: No other information
14.6 Special Precautions for user: No other information
14.7 Transport in bulk according to Annex II of Marpol and the IBC Code: Not applicable

15. Regulatory Information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture:
See the SDS for details of applicable regulations.

15.2 Chemical safety assessment

16. Other Information

List of R phrases/Hazard statements:
R23 Corrosive
 R36 Irritating to eyes
 R37 Irritating to skin

Sources of Data for SDS:
See literature references and sources of data.

Other Information:

Page 3 of 3

Tips for formulators who prepare and supply SDSs to their customers

- ✓ Ensure that the SDS is in compliance with Annex II (as updated by Reg. (EU) No. 2015/830) 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 web pages on the Health and Safety Authority's web site: [http://www.hsa.ie/eng/YourIndustry/Chemicals/Legislation Enforcement/REACH/Safety Data Sheets/](http://www.hsa.ie/eng/YourIndustry/Chemicals/Legislation%20Enforcement/REACH/Safety%20Data%20Sheets/)

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/](http://www.hsa.ie/eng/Publications%20and%20Forms/Publications/Chemical%20and%20Hazardous%20Substances/)

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

Guidance on compilation of Safety Data Sheets available on the web site of the European Chemicals Agency (ECHA) at <https://www.echa.europa.eu/safety-data-sheets>



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.hslearning.ie

