

Safety Data Sheets

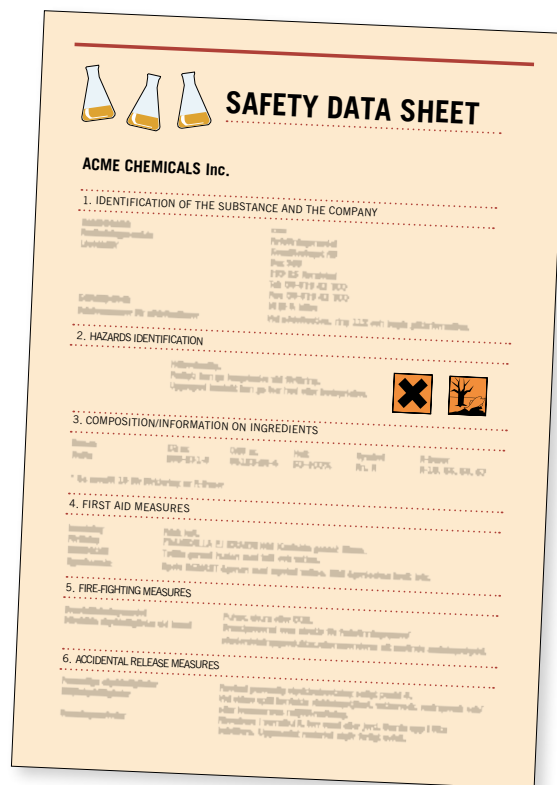
Professional users of chemicals often handle large volumes of substances over long periods of time. For this reason, anyone placing chemical products on the market shall provide a safety data sheet informing professional users about the risks associated with the product and the safety precautions to be taken.

The safety data sheets must be easy to read and as clear as possible. They have to be written in Swedish for products placed on the Swedish market.

All information relevant to the prevention of damage to human health and the environment must be included.

Updating of safety data sheets

The data sheets must be updated whenever rules are amended or the composition changed, or when new scientific data emerges which leads to a change in the classification of the product. The regulations do not specify how old a safety data sheet may be, but considering the regular amendments to rules, data sheets should normally not be older than two to three years.



16 headings to be included in the Safety Data Sheet

SDS sheets consist of 16 compulsory sections. These sections have headings and a fixed order. All information about the product that the user needs in order to minimise risks must be included. It is important that the data sheet gives an unambiguous

picture of the product's hazards so that the information is not contradictory.

Further information about the content requirements for safety data sheets can be found in Annex II, Regulation (EC) No 1907/2006 (REACH).

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

When should a safety data sheet be provided?

For products classified as hazardous

Safety data sheets, accompanying hazardous chemical products traded for professional use, shall be provided free of charge on paper or electronically. The information needs to be provided no later than at the time of the first delivery in order to enable adequate risk handling.

Updated data sheets must be provided to everyone who has received the product during the previous 12 months. It is not enough to publish the safety data sheet on the company website and expect the recipients to collect the information there by themselves. However, it is a valuable service to make the safety data sheets available on the company website.

For products not classified as hazardous, but for which the obligation for a data sheet applies

Safety data sheets must be provided if professional users request them. Information about this obligation should appear on the packaging (see further Annex 4, KIFS 2005:7).

Consumer-available products

There is no obligation to provide safety data sheets to consumers. If a professional user buys products in consumer packaging, the retailer has to be able to provide a safety data sheet on the user's request.

More information

For information about safety data sheets in Sweden, contact the REACH Helpdesk, e-mail: reach@kemi.se, www.kemi.se/reach_en.

Contact the Swedish Civil Contingencies Agency at www.msbmyndigheten.se for more information



about explosive, oxidising and flammable properties, as well as transport classification.

Contact the Swedish Environmental Protection Agency, www.naturvardsverket.se for more information about waste disposal.

Safety Data Sheets shall be available for:

- Substances and preparations that are hazardous (i.e. flammables, oxidising, explosives, hazardous to health or the environment) according to the Classification and Labelling of Chemical Products Regulations (KIFS 2005:7).
- Preparations, which are not classified as hazardous but which contain at least 1% (0.2% for gases) of a substance that is hazardous to health or the environment.
- Preparations which are not classified as hazardous but which contain at least one substance that has an EU limit value for exposure at the workplace.
- SDS are required in some other cases as well. Read more in Article 31, in the European Parliament and Council Directive (EC) No 1907/2006 (REACH).

Kemi and the Swedish Civil Contingencies Agency (MSB) advice on SDS

Comments on a few sections in the safety data sheets, which often lack information. Please observe that:

- These comments do not cover the entire legislation and serve only as advice on improvements of the safety data sheets.
- Ready-to-use data systems for producing safety data sheets can be deficient in many ways.

Standard phrases are easily given and general phrases can make it difficult for the reader to judge how each single product should be handled.

- Safety data sheets containing general wordings and lacking relevant information on the products are common. It is very important that the information in the data sheets is specific to the product.

1. Identification of the substance preparation and of the company/undertaking

It is important to state the area of application. In most cases, it should be possible to name a Swedish supplier. If a Swedish emergency telephone number is given it should be made clear whether it is reachable during office hours only.

2. Hazard identification

This section summarises the product's most important properties and is essential to assessing the risk at the workplace. Describe the product's harmful effects, both physical hazards (fire, explosion, etc.) and hazards to human health and the environment. In addition to the classification in the form of risk phrases, it is also important to give descriptions of symptoms. Hazardous properties that occur only in certain situations should also be described, for example risk of fire hazard when heating or risk of dust hazard when unpacking.

3. Composition/information on ingredients

State the included components of the composition and their concentrations. If the concentration range is stated, it should be given in such a way that it is clear how substances contribute to the hazardous properties and classification of the preparation. If the interval 15-30 percent is given, and the limit for a certain classification is 20 percent, it will not be clear which classification of the preparation the substance contributes to.

4. First aid measures

The measures should reflect how hazardous the product is. Simply recommending a long rinsing time, regardless of classification is not adequate. If at least 15 minutes of eye rinsing is necessary, the data sheet should state that the rinsing liquid must be at room temperature (20–30 °C). Read

more about eye rinsing in AFS 1999:7, the Swedish Work Environment Authority's provisions on first aid and crisis support.

5. Fire-fighting measures

State what is required to fight a fire, including information on appropriate and inappropriate fire fighting equipment, i.e. measures that lack effect or which in some cases might worsen the situation, e.g. by reacting with the product. State information on particular safety equipment for fire-fighting personnel that might be required. State specific hazards provoked by the products at fire, e.g. risk of explosive vapour/air mixtures or harmful incineration products.

6. Accidental release measures

State necessary protective measures to prevent or limit damages caused by the release, e.g. removing ignition sources and availability of ventilation. It is important to refer to Heading 8 on the need for personal safety equipment when handling spill. Reference to Heading 13 on disposal considerations is also needed in order to inform the user on how to handle polluted sanitary preparations as hazardous waste.

7. Handling and storage

For products with specific areas of application, recommendations should be adapted to the intended use. It is important that the information matches the hazardous properties of the product. Recommending exaggerated protective measures can be as bad as ignoring the risks. Two questions to ask when designing the information are: What risks might various work stages entail? Are there suggestions for solutions/protective measures (e.g. ventilation, explosion-resistant electrical equipment, eye rinsing facilities in the vicinity of handling areas)?

8. Exposure controls/personal protection

Ask similar questions as in Section 7. For instance, the material type needs to be specified for protective clothing, gloves and face masks, as well as the situations in which these must be used. Also state the occupational exposure limit values which need to be monitored. Read more in AFS 2005:17, the Swedish Work Environment Authority's provisions for occupational exposure limit values and measures against air contaminants.

9. Physical and chemical properties

State the aggregation state of the product (solid, liquid or gaseous), appearance, colour, viscosity, flash point and smell, and all other properties applicable to the product. It is particularly important to state the viscosity for products classified with the risk phrase (R65) "Hazardous, may cause lung damage if ingested". Bear in mind that the classification "Corrosive" may be needed for very acid or alkaline substances and preparations (pH<2 or pH>11.5). State the properties of preparations (mixtures of substances).

10. Stability and reactivity

This heading shall state the stability of the product and the risk of hazardous reactions during certain conditions of use and when released. Describe if hazardous degradation products might occur and/or hazardous reactions. State conditions and materials that could cause hazardous reactions and which should, thus, be avoided, e.g. temperature, pressure, light, thrusts, water, air, acids, bases or oxidation products. The properties shall normally be stated for preparations (mixtures of substances).

11. Toxicological information

Under this heading, many data sheets only state toxicity figures without an explanation. This information needs to be summarised in order to be understood by the reader. Descriptions of symptoms for all relevant exposure routes must be given. Note that the information should be more detailed than under Section 2.

12. Ecological information

Summarise the most important inherent characteristics which may affect the environment. State relevant data, e.g. toxicity, degradability and bioaccumulation. It should be clear whether the information relates to constituent substances which are hazardous to the environment or the preparation as a whole.

13. Disposal considerations

State appropriate disposal methods, both for the substance or the preparation and for polluted packagings. It should be clear if discarded products and polluted packagings are hazardous waste. Hazardous waste is defined in Annexes 2 and 3 to the Hazardous Wastes Ordinance (2001:1063). It is suitable to state proposals for waste codes (EWC codes) according to Annex 2 of the Hazardous Wastes Ordinance.

14. Transport information

State, wherever relevant, the transport classification according to applicable rules for each route of transport: ADR (road), RID (railway), IMDG (sea), ICAO/ATA (air). Several particulars may be relevant in the individual case but the following are the most important: UN number, transport class, hazard number according to ADR/RID, transport denomination and packaging group. State classification as marine pollutant according to IMDG, if any.

15. Regulatory information

State the product's classification and labelling, including complete risk and safety phrases. Make sure this heading matches the labelling.

16. Other information

State any particular provisions applicable to the product, e.g. regulations in the area of flammable and explosive articles. Sometimes wording occurs under this heading, attempting to acquit the company of the responsibility for the contents of the data sheet. Note that such formulations lack all legal effect.