

Material safety data sheets (MSDS)

Definition :

The (Material) Safety Data Sheet ((M)SDS) is a form distributed by the manufacturer or distributor of a chemical product, containing data on the properties of the chemical in question. From a global point of view, SDS are used to catalog the information of chemicals. It provides information on the dangers to health and environment as well as indications related to the means of protection and measures to be taken in case of emergency or accident. These data are essential in order to take action for the protection of health & safety at the workplace and to protect the environment.

Responsibilities and obligations :

These sheets are widely used for cataloging information on chemicals. One should be able to find them anywhere where a substance is used.

General rule


SDS must be filed and available, in order to be quickly and easily accessed by the user of the chemical product, where the product in question is used.


SDS general requirements are provided in art. 18 to 24 of the Ordinance on Protection against Dangerous Substances and Preparation (ChemO, CC 813.11). In practice, the following requirements must be met :

- For UNIL staff and students:
 - Follow the instructions of supervisors in relation to the use of chemicals and to protection measures
 - In the absence of instructions, request them directly with the supervisor
 - If necessary, ask to consult the SDS and speak with a specialist or with the UniSEP-SSTE Group
- As a supervisor :
 - Always have the latest version of each SDS
 - Define the correct use of the product based on the information in the SDS
 - If necessary, consult other documents or check with the UniSEP-SSTE Group
 - Establish written work requirements depending on the type of use and hazard of the product
 - Inform staff and students on the proper use, order appropriate protection measures and make available the necessary protective gear
 - Inform staff and students on how to behave in case of accident
 - Give staff and students access to SDS

Content of the safety data sheet :

The safety data sheet includes mainly 16 sections and contains the following data :

Material Safety Data Sheet (MSDS)		
Chemical product X (CAS # XXXX – XX – X)		
1.	Chemical product and company identification	
2.	Hazard identification (major adverse effects and physico-chemical symptoms to human health and the environment, etc.)	
3.	Information on the components of the product (list of components, concentrations, etc.)	
4.	Description of first aid in case of emergency	
5.	Fire fighting measures	
6.	Measures to be taken in case of accidental dispersion (individual, environmental and cleaning)	
7.	Storage, use and handling precautions	
8.	Supervision of workers exposure and personal protection equipment (exposure limit values and exposure control)	
9.	Product physical and chemical properties	
10.	Product stability and reactivity	
11.	Toxicological information	
12.	Ecological information (ecotoxicity, degradability, etc.)	
13.	Information on waste disposal	
14.	Information relating to the transport of the product	
15.	Regulatory information (product classification, labelling, etc.)	
16.	Other information contributing to the health and safety of the user and of the environment	



NOTE : SDS must be used with caution! Indeed, the issuance and content of the SDS are the responsibility of the manufacturer of the chemical product concerned: two SDS for the same product may therefore feature notable differences and create confusion! In general, SDS are available on the manufacturer's website. Below is a list of the most common providers of laboratory chemicals:

- [Merck](http://www.merckmillipore.com) (www.merckmillipore.com)
- [Sigma-Aldrich](http://www.sigmaaldrich.com) (www.sigmaaldrich.com)
- [Fisher Scientific](http://www.fishersci.com) (www.fishersci.com)
- [PanGas](http://www.pangas.ch) (www.pangas.ch)
- [Carbagas](http://www.carbagas.ch) (www.carbagas.ch)

Various internet databases also include the available SDS for several products. Some of these databases are freely accessible on the internet and need to be consulted to identify a compound's chemical hazards. The [ILPI](http://www.ilpi.com/msds/index.html) (Interactive Learning Paradigms Incorporated, www.ilpi.com/msds/index.html) website lists some internet databases publishing some SDS.

Also, INRS's (www.inrs.fr) toxicology data sheet remain very useful and represent a reference in order to obtain further detailed information on a particular substance (in French).



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