







How to read the Material Safety Data Sheet

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19/08/2014

National Research Infrastructure





MSDS –**Safety Data Sheet** (Also called Safety Data Sheet, SDS often inside the European Union)

A MSDS is a document prepared by the manufacturer or importer. The MSDS will state whether the chemical is classified as hazardous and/or dangerous.

Note: If a chemical is not classified hazardous in MSDS it does not automatically mean that it is not hazardous.

1. Identification of the substance/mixture and of the company

• Here you can check the identification against the label (make sure you have the right SDS).

2. Hazards Identification

- the classification
- · a statement of the overall hazardous nature
- risk phrases
- safety phrases.

3. Composition and information on ingredients

• Identifies the material by its chemical identity, and the ingredients if it is a mixture.

4. First Aid measures

• Describes first aid, according to the route of exposure. This will indicate medical attention and special treatment needed including a description of the most important symptoms (acute and delayed). Includes advice to medically trained personnel.





5. Fire-fighting measures

Look here for advice on fire fighting, including:

- the types of extinguisher you should have
- · the most suitable extinguishing media
- hazards from combustion products
- special precautions for fire fighters.

6. Accidential release measures

- Personal and environmental procedures
- emergency procedures
- methods and materials for containment and clean-up.

7. Handling and storage

- · precautions for safe handling
- · conditions for safe storage, including any incompatibilities

8. Exposure control and personal protection

- exposure standards (if assigned not all substances have these)
- biological exposure limits (this is relevant to health monitoring e.g. concentrations in blood or urine)
- engineering controls this shows how to reduce exposure and risks (e.g. ventilation methods)
- recommended personal protective equipment (PPE) the specific types of protective clothing (e.g. type of gloves, apron) and respirator (if required), to reduce exposure.

9. Physical and chemical properties

• Covers a wide range of technical information, and includes appearance and smell.

10. Stability and reactivity

• Tells you conditions to avoid and incompatible materials (i.e. do not use or keep it near substances that are incompatible).





11. Toxicological information

• Describes the health effects (if any) from the likely routes of exposure.

12. Ecological information

• Indicates toxicity to organisms such as fish, its persistence and biodegradability and mobility in the environment.

13. Disposal considerations

• Recommends disposal methods and containers and any special precautions for landfill or incineration.

14. Transport information

Includes the following information relevant to its dangerous goods classification (if any):

- UN number
- proper shipping name
- Class and Subsidiary Risk
- Packing Group
- special precautions
- Hazard labels

15. Regulatory information

• Lists relevant regulations and legislation controlling use of the chemical.

16. Other information

- Indication of changes
- Key sources of data
- Etc etc...



MSDS - Safety Data Sheet

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	Edit Delete	Add/edit documents	1,2 Dichloroethane		Organic Solvent			Paula Kettula	User Instructions Material Safety Data Sheet [info]	Personal chemical	
	Edit Delete	Add/edit documents	1-Methyl-2-pyrrolidin	one	Organic Solvent			Paula Kettula	User Instructions Material Safety Data Sheet [info]	Personal chemical	
	Edit Delete	Add/edit documents	2-Amino-2-methyl-1-	propanol	Organic Solvent			Paula Kettula	User Instructions Material Safety Data Sheet [info]	Personal chemical Thinfilm lab	

MSDS for all cleanroom and thin film lab chemicals are available in LIMS/Info/Chemical list



MSDS must be available also during power failures
→ paper copies are available next to the cleanroom entrance.