MSDS

How to read the Material Safety Data Sheet

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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).

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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…

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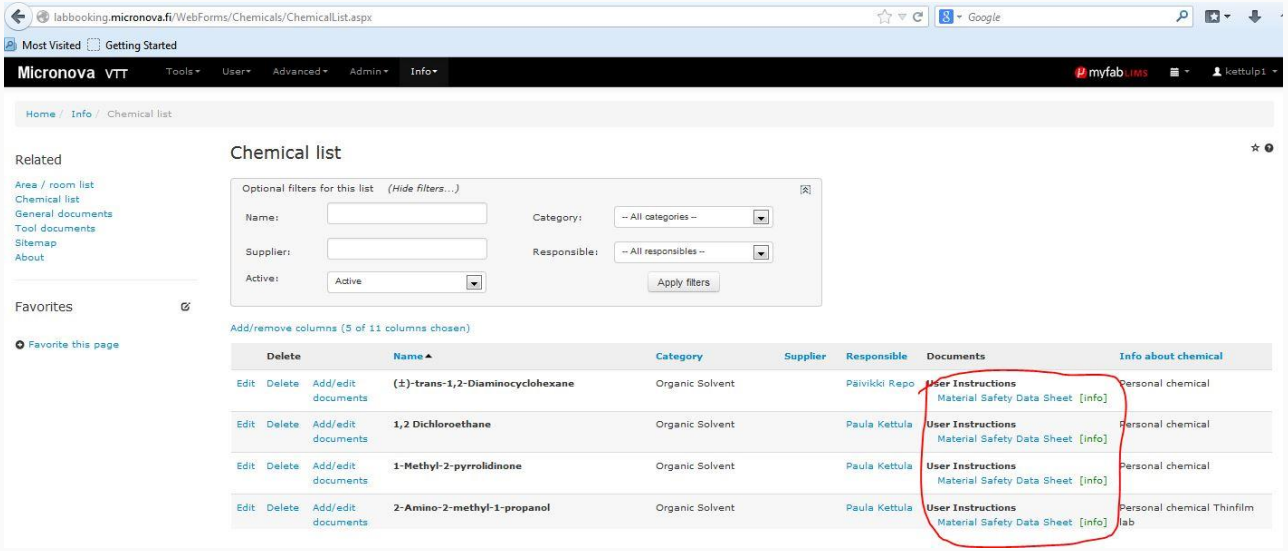

MSDS for all cleanroom and thin film lab chemicals are available in LIMS/Info/Chemical list

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