

The safe use of materials: Technology (Mandatory)

In *Technology* you will learn about the correct and safe use of tools and materials for specific processes that are used to construct a project.

This material addresses aspects of the following syllabus outcome:

4.3.2 A student demonstrates responsible and safe use of a range of tools, materials and techniques in each design project.

Extract from: Stage 4 Technology Syllabus © Board of Studies NSW 2003.

The safe use of materials

The material safety data sheet (MSDS) of a substance describes:

- its identity
- relevant health hazard information
- precautions for use
- safe handling information.

The purpose of material safety data sheets is to provide the information needed to allow the safe handling of hazardous substances.

An example of a MSDS is shown below. Carefully examine this sheet and complete the activity.

Substance name	
Turpentine	
CAS Numbers	UN Numbers
8006-64-2	1299 1300
Classification	
R10 - Flammable Harmful (Xn) R20/21/22 - Harmful by inhalation, in contact with skin and if swallowed.	
Cut-off values	
At Concentrations equal to or more than 25%: Harmful (Xn) R20/21/22 - Harmful by inhalation, in contact with skin and if swallowed.	
Labelling	
Harmful (Xn) R10 - Flammable R20/21/22 - Harmful by inhalation, in contact with skin and if swallowed. Safety Phrase(s) (2)	
Source	
Listed in the Exposure Standards for Atmospheric Contaminants in the Occupational Environment [NOHSC:1003(1995)] (and updates to 1998) Listed in the European Union Annex I of the EEC Council Directive 67/548/EEC (as updated by EC Council Directive 96/54/EC8	
Exposure standards	
No exposure standards available.	

Activity: Interpreting material safety data sheets (MSDS)

1. What general information is outlined on material safety data sheets?

2. Describe the purpose for producing material safety data sheets.

3. For which material has this material safety data sheet been prepared?

4. Outline the general safety hazards associated with the use of this substance in a workshop.

5. What specific information should be noted when handling this substance?
