

# Safe Working Procedures and Instruction

## Labels and MSDS in the Workplace

### Understanding MSDS

Chemicals used in the workplace can be classed in four different ways:

- Hazardous substances
- Poisons
- Dangerous goods
- Agricultural / Veterinary

A chemical can be a hazardous substance and/or a poison or any other of these classifications or combination of classifications. Hazardous substances are substances which are harmful to health.

### Labels and MSDS in workplaces

Occupational Health and Safety (Hazardous Substances) Regulations specify the legal obligations of suppliers and employers.

Suppliers, including importers and manufacturers, are required to provide labels on containers and MSDS for the hazardous substances they supply.

Employers (including Principals) must ensure that container labels are appropriate and make sure MSDS are accessible to staff and other employees who may be exposed to these hazardous substances.

All hazardous substances used in the workplace must be listed in a central register together with copies of the relevant MSDS. All staff and other employees must have access to this register.

Hazardous Substances regulations also require that Principals provide instruction and training to help staff and other employees understand the information on labels and MSDS and how to apply this information in their work at the workplace.

### Reading labels

Reading the label on containers is the first step in getting health and safety information on the chemicals used in your workplace.

It is important to recognise the symbols and read labels so that steps can be taken to protect the health of all those exposed to the substance.

Chemicals classified as hazardous substances have labels that show:

- a symbol or key word indicating the hazard such as:
  - the dangerous goods "diamond"
  - a "signal word" providing a warning about the substance
  - the word "Hazardous" (in red)
- product name
- chemical name(s) of the substance and/or ingredients
- risk information
- directions for use
- safety information
- first aid directions
- emergency procedures
- name and phone number of manufacturer or supplier
- expiry date (where relevant)
- reference to an MSDS

### Container Labelling

Labels are required so that the contents of a container can be easily identified. The supplier is responsible for the correct labelling of a hazardous substance.

Hazardous substances should be stored in accordance with the information provided on the Material Safety Data Sheets.

### Levels of Associated Risk

Chemicals have been classified under the poisons schedule



classification and the signal heading on the label nominates the poison schedule classification to which that particular chemical belongs.

#### **Moderate risk (level 2):**

Activities involving the use of non-scheduled poisons. These chemicals are very slightly toxic and indicated on the label by the cautionary statement:

**KEEP OUT OF REACH OF CHILDREN**

#### **Substantial risk (level 3):**

Activities involving the use of Schedule 5 poisons. These chemicals are low to moderate in toxicity and indicated on the label by the signal heading:

**WARNING**

Followed by the cautionary statements:

**KEEP OUT OF REACH OF CHILDREN**

**READ SAFETY DIRECTIONS BEFORE OPENING**

#### **High risk (level 4):**

Activities involving the use of Schedule 6 poisons. These chemicals are moderate to high in toxicity and indicated on the label by the signal heading:

**POISON**

Followed by the cautionary statements:

**NOT TO BE TAKEN**

**KEEP OUT OF REACH OF CHILDREN**

**READ SAFETY DIRECTIONS BEFORE OPENING**

#### **Very High risk (level 5):**

Activities involving the use of Schedule 7 poisons. These chemicals are extremely toxic and indicated on the label by the signal heading:

**DANGEROUS POISON**

Followed by the cautionary statements:

**NOT TO BE TAKEN**

**KEEP OUT OF REACH OF CHILDREN**

**READ SAFETY DIRECTIONS BEFORE OPENING**

### **Material Safety Data Sheets (MSDS)**

Reading the Material Safety Data Sheet (MSDS) is the second step in getting more detailed health and safety information on the chemicals used and stored.

A Material Safety Data Sheet (MSDS) is a document prepared by the manufacturer of the product or the supplier. MSDS should clearly state if a product is a hazardous substance.

An MSDS should have arrived with the first supply of a hazardous substance. If an MSDS is not made available you should contact the supplier.

#### **MSDS Content**

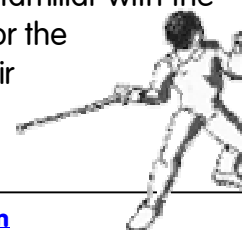
The MSDS will give information relating to:

- the ingredients of the product
- the health effects of the product and first aid instructions
- precautions to follow when you use the product
- safe handling and storage information.

Just because an MSDS has been provided this does not automatically mean that the product is now safe to use. It is important that a risk assessment of the substance is carried out.

#### **Organising MSDS**

- Keep copies of the MSDS for each substance used in the workplace and place them in a central register.
- Make sure that the MSDS supplied is complete and is not more than five years old.
- Store the MSDS in a place that is accessible to all staff and other employees.
- Make sure everyone is familiar with the contents of the MSDS for the substances used in their work area.



- All staff, other employees, students and volunteers must be trained in the correct use of hazardous substances.

### Using MSDS

Use Material Safety Data Sheets to:

- identify if the product is a hazardous substance
- assist in carrying out risk assessments

You can also use MSDS to:

- find out how to use a product safely
- check that all products are being used in the right way for the right job
- decide whether any improvements should be made to machinery or procedures
- decide whether any monitoring for airborne contamination should be conducted
- check that emergency equipment and procedures are adequate
- develop on-the-job training

### Material Safety Data Sheet Format

The format of the MSDS that you receive may be slightly different, but you should expect to find the following information.

- **Statement of hazardous nature:**  
"Hazardous according to Worksafe criteria"
- **Date of issue:** Check that it is not more than five years old
- **Manufacturer's or supplier's details:**
  - Company name: address: Telephone number: Emergency telephone number
- **Identification section:**
  - Product names: Other names
  - Manufacturer's product code
  - UN number - *UN numbers apply to substances classified as dangerous goods.*
  - Dangerous Goods class and subsidiary risk
  - Hazchem code - *The Hazchem code is for responding to road emergencies*

- Poisons schedule number
- Packing group

- **Use:**

This part outlines recommended uses or intended use by the manufacturer and methods of application.

- **Physical description and properties:**

This covers a wide range of technical information on properties such as melting and boiling points, flash point and flammability.

- **Ingredients:**

- Chemical name: CAS number
- Proportions

*This gives you the chemical identity of each hazardous ingredient.*

- **Health hazard information:**

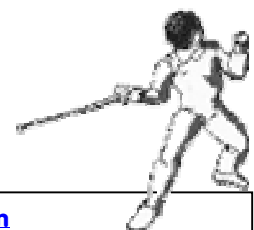
- Health effects: First aid
- Advice to doctor

- **Precautions for use:**

- Exposure Standards
- Engineering controls
- Personal protection:
- Flammability:

- **Safe handling information:**

- **Storage and transport:** Safe storage and transport requirements including any chemical incompatibility.
- **Spills and disposal:** Information on suitable methods to avoid spills, materials to absorb spills and suitable methods of disposal.
- **Fire and explosion hazards:** This includes information for fire fighting and emergency services. Shows the types of fire extinguishers you should use.





## LABELS AND MSDS – SAFETY TEST

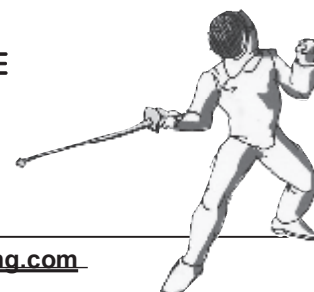
**DO NOT WRITE ON THIS PAPER – USE ANSWER SHEET**

**On your answer sheet, choose the correct response for each question, circling 'A', 'B', 'C', or 'D'.**

**DO NOT ANSWER ON THIS PAGE**

- Chemicals used in the workplace can be classed into four different groupings. Select the correct set of chemical groupings.
  - Hazardous substances, Poisons, Dangerous goods, Fuels.
  - Hazardous substances, Poisons, Animal medications, Agricultural / Veterinary.
  - Hazardous substances, Paints, Dangerous goods, Agricultural / Veterinary.
  - Hazardous substances, Poisons, Dangerous goods, Agricultural / Veterinary.
- What is an MSDS?
  - Mining Safety Detail Sheets
  - Material Summary Data Statistics
  - Metals Safety Data Schedules
  - Material Safety Data Sheets
- What is the first step to gaining information about chemicals being used?
  - Seek instruction and training.
  - Read the label of the container.
  - Gain access to the MSDS.
  - Ask the manufacturer for information.
- An MSDS will give information about a chemical. Which of the following is NOT found in an MSDS?
  - The ingredients of the product and the health effects of the product.
  - Chemical equivalents and neutralising agents.
  - Safe handling and storage information.
  - Precautions to follow when you use the product and first aid instructions.
- The information in an MSDS can be used for many purposes. Which of the following is NOT one of the three recognised purposes of an MSDS?
  - To check that emergency equipment and procedures are adequate.
  - To find out how to use a product for a purpose it is not ordinarily designed for.
  - To decide whether any monitoring for airborne contamination should be conducted.
  - To decide whether any improvements should be made to machinery or procedures.
- The MSDS will give SAFE HANDLING information. Which of the following is NOT one of the main areas of safe handling outlined in the MSDS?
  - Spills and disposal.
  - Storage and transport.
  - Poisons schedule number.
  - Fire and explosive hazards.
- Which of the following is NOT a signal heading found on the labels of chemical containers?
  - "NOT TO BE TAKEN"
  - "RESTRICTED TO ADULT USE ONLY"
  - "DANGEROUS POISON"
  - "KEEP OUT OF REACH OF CHILDREN"

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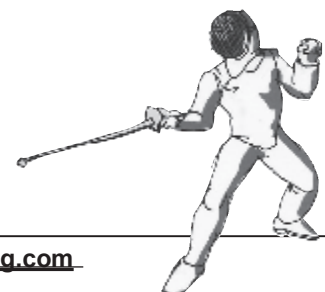


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8. Copies of MSDS for each substance used in the workplace should be placed in a central register. Which of the following organisational aspects of MSDS should be adhered to?
- A Make sure that the MSDS is not more than five years old.
  - B Store the MSDS in a place that is accessible to all employees.
  - C All of the answers given.
  - D Make sure everyone is trained in the correct use of hazardous substances.
9. Chemicals classified as hazardous substances have labels that must show specific information. Which of the following is information NOT required?
- A Directions for use and safety information.
  - B Retail price and colour of the chemical.
  - C A symbol or key word indicating the hazard.
  - D First-aid directions and emergency procedures.
10. Schedule 5 poisons are chemicals that are low to moderate in toxicity and indicated on the container label by the signal heading?
- A DANGEROUS POISON – Followed – NOT TO BE TAKEN – KEEP OUT OF REACH OF CHILDREN
  - B POISON – Followed by – NOT TO BE TAKEN – KEEP OUT OF REACH OF CHILDREN
  - C KEEP OUT OF REACH OF CHILDREN
  - D WARNING – Followed by – KEEP OUT OF REACH OF CHILDREN – READ SAFETY DIRECTIONS BEFORE OPENING



# LABELS AND MSDS – SAFETY TEST

## ANSWER SHEET

STUDENT NAME \_\_\_\_\_ DATE \_\_\_\_\_

Please **CIRCLE** the correct answer in blue or black ink

1.    A    B    C    D

2.    A    B    C    D

3.    A    B    C    D

4.    A    B    C    D

5.    A    B    C    D

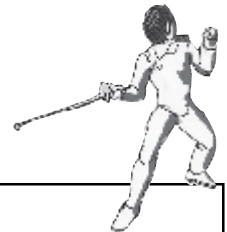
6.    A    B    C    D

7.    A    B    C    D

8.    A    B    C    D

9.    A    B    C    D

10.   A    B    C    D



NUMBER CORRECT \_\_\_\_\_

TEACHER SIGNATURE \_\_\_\_\_

CERTIFICATE AWARDED (Yes / No)

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**ANSWER KEY**

1. D

2. D

3. B

4. B

5. B

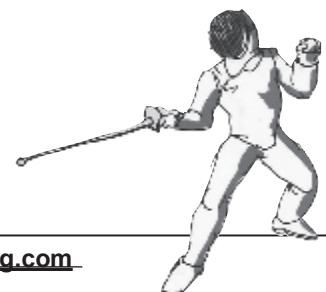
6. C

7. B

8. C

9. B

10. D



# CERTIFICATE OF SAFETY

General Safety Precautions ✓

Personal Safety ✓

Pre-operational Safety ✓

Operating Safety ✓

**SUCCESSFUL  
COMPLETION  
OF THE SAFE  
WORK TEST HAS  
CONFIRMED THAT**

\_\_\_\_\_

IS NOW

**CERTIFIED**

TO HAVE SHOWN A WORKING KNOWLEDGE AND  
UNDERSTANDING OF

**LABELS AND MSDS**

Location: \_\_\_\_\_

Course: \_\_\_\_\_

Supervisor: \_\_\_\_\_

Date: \_\_\_\_\_



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