

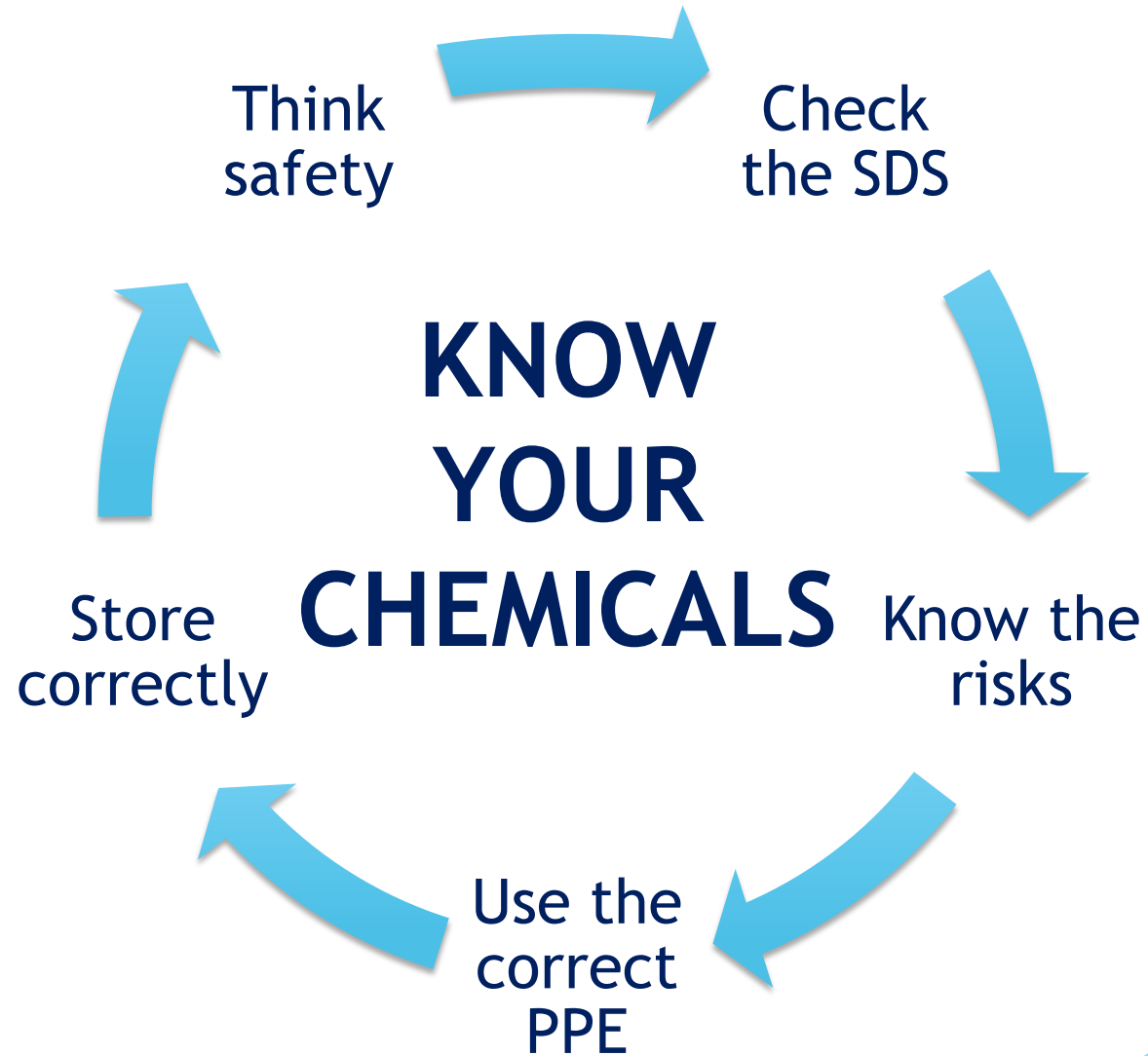
The background features abstract, overlapping geometric shapes in various shades of blue, ranging from light sky blue to deep navy blue. These shapes are primarily located on the left and right sides of the frame, creating a modern, dynamic feel. The central area is a plain white background where the text is placed.

# Alwyn Rehabilitation Hospital

Safe Use of Chemicals Training Module

# Handling Cleaning Chemicals Safely in the Workplace

We all use cleaning chemicals, both at work and at home. To be able to use chemicals safely we need to understand the potential risks, where to find information, and then be able to use this information in our everyday practices. For the sake of both ours and our colleague's health, we need to take chemical safety seriously.





## ABOUT THIS LEARNING MODULE

By the end of this module you should have a basic understanding of the potential hazards connected to using chemicals.

You should also know where to find safety information for each of the chemicals you use.

Key sources of information that will be referred to are safety data sheets, commonly known as SDS's.

# RESPONSIBILITIES



Who is responsible for safety?

**WE ALL ARE!**

Each individual has a responsibility to create and maintain a safe working environment.

Why is it so important? Because the part you play helps to keep YOU and OTHERS safe!

# EMPLOYER RESPONSIBILITIES

While we are all responsible for safety, employers have some specific legal responsibilities.

All employers must:

- ▶ Identify chemicals which are hazardous
- ▶ Ensure all safety data sheets (SDS's) are on hand for all employees
- ▶ Ensure all products and containers are correctly labelled
- ▶ Conduct risk assessments
- ▶ Minimise any risks identified
- ▶ Consult with employees and provide safety training

# HOW COULD CHEMICALS AFFECT YOUR HEALTH?

There are three categories that we will examine today. Depending on the chemical, they can be classified as:

## **TOXIC**

With toxic substances there is a likely risk of seriously damaging your health with continuous exposure above the recommended limits. Exposure can be via ingestion (putting in your mouth and swallowing), contact with the skin or through inhalation (breathing in).

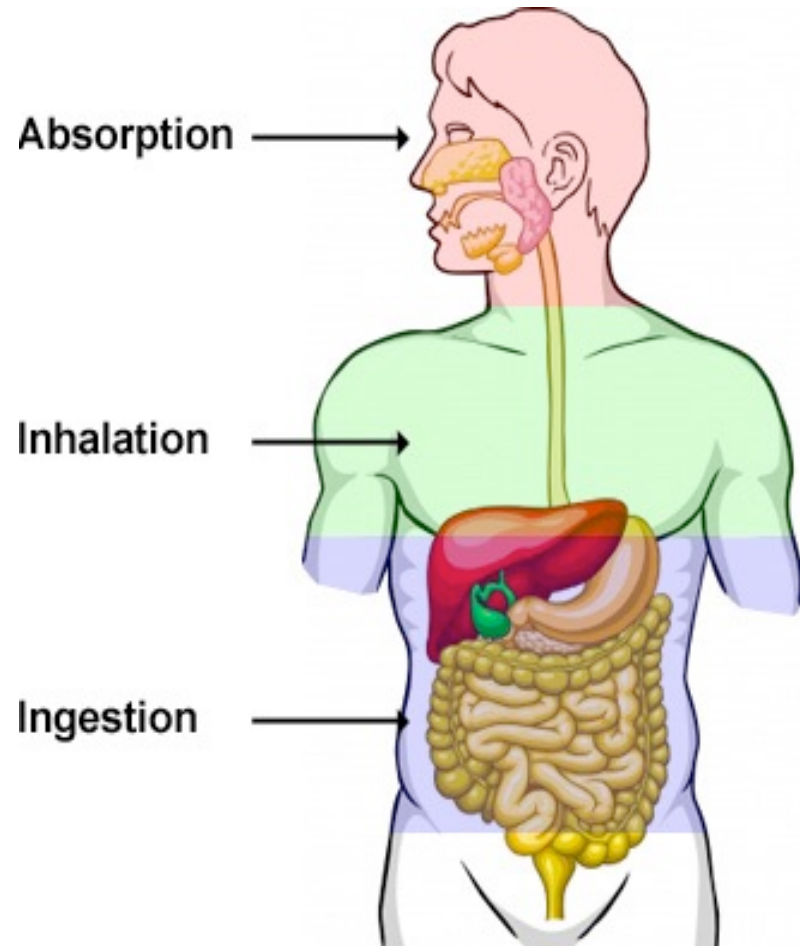
## **IRRITANTS**

Some chemicals are irritants and may result in skin inflammation, eye irritation, serious eye effects, and irritation of respiratory system.

## **CORROSIVE**

Common chemicals that are classified as corrosive include dish-washing powders. Corrosive chemicals can burn the skin, eyes and other living tissue.

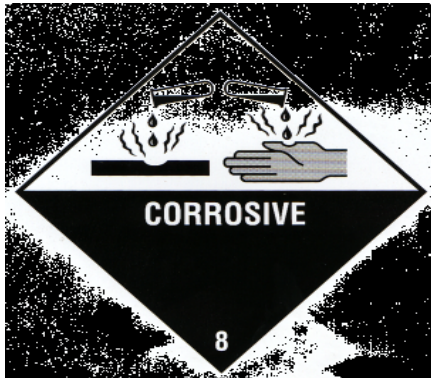
# EXPOSURE



There are three ways you can be exposed to chemicals:

- ▶ Absorption - occurs when your skin comes in contact with the chemical
- ▶ Inhalation - may occur when you are breathing in air-borne particles
- ▶ Ingestion - swallowing the chemical





## DANGEROUS GOODS CLASSIFICATION

Some cleaning chemicals have specific classifications. Three you need to be aware of are:

### Corrosives

Incorrect use of corrosive substances may cause **severe damage to living tissue**. Corrosive substances can also cause damage to metal surfaces and they may react with other chemicals.



### Flammable liquids

These substances may cause **fire** or **explode** if handled incorrectly.



### Oxidising agents

These chemicals can **react with combustible material**, such as paper or sawdust, so particular care needs to be taken when containing or cleaning up as spill.

# IDENTIFYING RISKS

Now that you know about some of the potential risks, where do you go to find out about risks for the product/s you are using?

## Manufacturer's Labels

These labels give you all the basic information you require. You should always read the label before using a product. **NEVER** remove the label.

If you cannot find or read a label, or suspect it is incorrect, tell your manager and **DO NOT** use the contents.

## Safety Data Sheets (SDS)

An SDS will give you very detailed information. They contain information necessary to use and store chemical products safely as well as cleaning up spills and first aid treatment for exposure. You should **always read the SDS** to familiarise yourself before using a product.

## Ask your Manager

If you have more questions, or suspect anything is amiss, you should ask your manager. You should never use a product you are not sure about.

# MANUFACTURER'S LABELS



Labels contain important information about the product. These include:

- ▶ The product's trade name
- ▶ The manufacturer's contact details
- ▶ A list of any hazardous ingredients
- ▶ The possible harmful effects. Look for key words such as “hazardous”, any risk/hazard phrases and dangerous goods labels or diamonds.
- ▶ Safe usage directions
- ▶ Basic first aid information
- ▶ Basic emergency information

# Safety Data Sheets or SDS



An SDS contains additional information that you need to familiarise yourself with before using a product.

An SDS has more detail than a label, and includes information such as:

- ▶ Product identification
- ▶ The ingredients and properties of the product
- ▶ Known potential health and physical hazards
- ▶ First aid and emergency actions
- ▶ Precautions you need to take when handling the product
- ▶ Correct storage, clean up and disposal

## Safety Data Sheets continued ...

[illegible]

All SDS should have 16 sections containing detailed information that you need to know before using a product. Some of the key sections are:

- ▶ Hazard identification
- ▶ Toxicological and ecological information
- ▶ Handling and storage information
- ▶ Accidental release measures and considerations

# If we look at an SDS in more detail we would find the following:

This SDS is prepared in accord with the SWA document "Preparation of Safety Data Sheets for Hazardous Chemicals - Code of Practice" (Feb 2016).

## SAFETY DATA SHEET

Mr Sheen Trigger

### 1. Identification of the material and supplier

**Names**  
Product name : Mr Sheen Multi-Surface Polish Trigger

SDS no. : 31031 - SD AU v9.2  
Formulation # : 0334818 v1.0 (Pot pourri)  
Supplier : AUSTRALIA  
Reckitt Benckiser (Australia) Pty Limited  
ABN: 17 003 274 655  
44 Wharf Road West Ryde NSW 2114  
Tel: +61 (0)2 9857 2000

NEW ZEALAND  
Reckitt Benckiser (New Zealand) Limited  
2 Fred Thomas Drive, Takapuna,  
Auckland, New Zealand 0622  
Tel: +64 9 484 1400

Emergency telephone number : (7am - 10pm business days EST Australia): +61 (02) 9857 2444  
(9am - 12am business days New Zealand): +64 9 484 1400

Poison information contact: Australia - 13 11 26  
New Zealand - 0800 764 766 or 0800 POISON

**Material uses**  
Product use : Furniture polish  
Consumer

### Section 2. Hazard(s) identification

Classification of the substance or mixture : Not classified

Percentage of the mixture consisting of ingredient(s) of unknown toxicity: 4%

**GHS label elements**  
Signal word : No signal word.  
Hazard statements : No known significant effects or critical hazards.

**Precautionary statements**  
General : Read label before use. Keep out of reach of children. If medical advice is needed, have product container or label at hand.

**Prevention**  
Response : Not applicable.  
Storage : Not applicable.  
Disposal : Not applicable.  
Supplemental label elements : Not applicable.

Other hazards which do not result in classification : None known.

Date of issue : 02/12/2016 Page: 1/9

## Section 1: identification of the material and supplier

This section includes the product name, its uses, supplier contact details and emergency contact numbers.

## Section 2: Hazard(s) identification

Warning information and hazardous statements including risk and safety phrases.



# Continued ...

## Section 3: Composition and ingredient information

This section contains information on any ingredients including those that are classified as hazardous.

## Section 4: First aid measures

Has information on the need and urgency for medical attention, and what measures to take for eye contact, skin contact, inhalation and ingestion.

## Section 5: Firefighting measures

Contains information for use in an emergency situation, including any special protective equipment for the fire fighters.

31031 - SD AU v9.0

---

**Section 3. Composition and ingredient information**

Substance/mixture : Mixture

Ingredient name	% (w/w)	CAS number
Siloxanes and Silicones, di-Me	<10	63148-62-9
Paraffins (petroleum), normal C5-20	<10	64771-72-8

Other Non-hazardous ingredients to 100%  
Occupational exposure limits, if available, are listed in Section 8.

---

**Section 4. First aid measures**

Description of necessary first aid measures

**Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.

**Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.

**Skin contact** : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.

**Ingestion** : Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.

Most important symptoms/effects, acute and delayed

Potential acute health effects

**Eye contact** : No known significant effects or critical hazards.

**Inhalation** : No known significant effects or critical hazards.

**Skin contact** : No known significant effects or critical hazards.

**Ingestion** : No known significant effects or critical hazards.

Over-exposure signs/symptoms

**Eye contact** : No specific data.

**Inhalation** : No specific data.

**Skin contact** : No specific data.

**Ingestion** : No specific data.

Indication of immediate medical attention and special treatment needed, if necessary

**Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

**Specific treatments** : No specific treatment.

**Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training.

See toxicological information (Section 11)

---

**Section 5. Firefighting measures**

Extinguishing media

**Suitable extinguishing media** : Use an extinguishing agent suitable for the surrounding fire.

**Unsuitable extinguishing media** : None known.

---

Date of issue : 02/12/2016 Page: 2/9

# Continued ...

## Section 6: Accidental release measures

It lists the appropriate responses to spills including personal precautions, environmental precautions and methods to clean up spills.

## Section 7: Handling and storage

This section has information on safe handling and storage practices, including compatibility (if appropriate), to minimise potential hazards.

31031 - SD AU v9.0	
<b>Section 5. Firefighting measures</b>	
<b>Specific hazards arising from the chemical</b>	: In a fire or if heated, a pressure increase will occur and the container may burst.
<b>Hazardous thermal decomposition products</b>	: No specific data.
<b>Special protective actions for fire-fighters</b>	: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
<b>Special protective equipment for fire-fighters</b>	: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full-face-piece operated in positive pressure mode.
<b>Section 6. Accidental release measures</b>	
<b>Personal precautions, protective equipment and emergency procedures</b>	
<b>For non-emergency personnel</b>	: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spill material. Put on appropriate personal protective equipment.
<b>For emergency responders</b>	: If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
<b>Environmental precautions</b>	: Avoid dispersal of spill material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
<b>Methods and material for containment and cleaning up</b>	
<b>Small spill</b>	: Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
<b>Large spill</b>	: Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Note: See Section 1 for emergency contact information and Section 13 for waste disposal.
See Section 1 for emergency contact information. See Section 8 for information on appropriate personal protective equipment. See Section 13 for additional waste treatment information.	
<b>Section 7. Handling and storage</b>	
<b>Precautions for safe handling</b>	
<b>Protective measures</b>	: Put on appropriate personal protective equipment (see Section 8).
<b>Advice on general occupational hygiene</b>	: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
<b>Date of issue</b>	: 02/12/2016
<b>Page:</b> 3/9	



# Continued ...

31031 - SD AU v9.0	
<b>Section 7. Handling and storage</b>	
Conditions for safe storage, including any incompatibilities	: Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination.
<b>Section 8. Exposure controls and personal protection</b>	
<a href="#">Control parameters</a>	
<a href="#">Australia</a>	
<a href="#">Occupational exposure limits</a>	
None.	
<a href="#">New Zealand</a>	
<b>Ingredient name</b>	<b>Exposure limits</b>
Paraffins (petroleum), normal C5-20	<b>NZ OSH (New Zealand, 2/2013).</b> WES-TWA: 5 mg/m <sup>3</sup> 8 hours. Form: Mist WES-STEL: 10 mg/m <sup>3</sup> 15 minutes. Form: Mist
<b>Appropriate engineering controls</b>	: Good general ventilation should be sufficient to control worker exposure to airborne contaminants.
<b>Environmental exposure controls</b>	: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.
<a href="#">Individual protection measures</a>	
<b>Hygiene measures</b>	: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
<b>Eye/face protection</b>	: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.
<a href="#">Skin protection</a>	
<b>Hand protection</b>	: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.
<b>Body protection</b>	: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
<b>Other skin protection</b>	: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
<b>Respiratory protection</b>	: Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.
<b>Date of issue</b>	: 02/12/2016
<b>Page:</b> 4/9	

## Section 8: Exposure controls and personal protection

Contains measures to take to minimise any potential risks, occupational exposure limits and lists recommended Personal Protective Equipment (also known as PPE) that is required to keep you safe.

You should focus your attention on these first 8 sections as it will give you all of the information required to use the product in a way that minimises risk to you and others.

# Continued ...

The remaining sections are primarily for emergency services. Section names are included for completeness so that you may be aware of what is included:

**Section 9: Physical and chemical properties** - lists its chemical properties

**Section 10: Stability and reactivity** - tells you under what conditions this product is stable

**Section 11: Toxicological information** - lists information on potential acute and chronic health effects when exposed to product.

**Section 12: Ecological information** - lists ecological hazards

**Section 13: Disposal considerations** - recommends safe methods of disposing of unused product and “empty containers”

**Section 14: Transport information** - lists codes required for shipping/transport

**Section 15: Regulatory information** - shows regulatory status of the product

**Section 16: Any other relevant information** - lists changed information from previous SDS

# Where do you find an SDS?



Every product YOU use has an SDS and you should be familiar with their location.

They will normally be kept close to where the product is used or stored. Please check that you have an SDS for every cleaning product you use, then review them from time to time. If you cannot find an SDS, ask your manager.

There is also a central register containing copies of every SDS.

# How do you minimise your risk?

When working with cleaning products or any chemicals, there are some basic safety steps we all must take. You should ALWAYS:

- ▶ Know what you are handling
- ▶ Read the label and SDS
- ▶ Know what to do in an emergency
- ▶ Wear appropriate PPE as listed on the SDS
- ▶ Wash your hands after using cleaning products
- ▶ If mixing is required, add the chemical to water, (NOT water to product) to avoid concentrated splashes; and
- ▶ Always store, dispense and dispose of correctly



# How do you minimise your risk?

When working with cleaning products or any chemicals, there are some basic safety steps we all must take. You should **NEVER**:

- ▶ Use chemicals from an unlabelled container - unlabelled containers should be reported
- ▶ Store chemicals in an unlabelled container
- ▶ Store chemicals at high temperatures as it can make them unstable
- ▶ Never mix chemicals
- ▶ Inhale or ingest chemicals, eg do not sniff at chemicals to determine what it is
- ▶ Never allow contact with skin or eyes



# Emergency: what to do if you or others are injured



If you do come in contact with a cleaning product, always refer to the label and SDS for first aid information:

- ▶ Remove contaminated clothing to reduce contact with the substance
- ▶ Rinse exposed skin under running water for a minimum of 15 minutes
- ▶ Flush eyes under running water for a minimum of 15 minutes
- ▶ If ingested, do not induce vomiting, sip water instead
- ▶ If inhaled, move to fresh air and rest

You should report any instances on an Incident Report and seek medical attention immediately.



# Emergency: what to do to contain or clean spills

If a chemical is spilled, you need to clean it up as quickly as possible, to reduce slip injuries, and the chance of the chemical contaminating drains. You need to:

- ▶ Put up relevant signage to warn others of the dangers
- ▶ Report the spill to your manager
- ▶ Refer to the SDS for information on personal and environmental precautions, and methods to clean up and dispose of spills
- ▶ Use the spill kit and wear the recommended PPE when cleaning up
- ▶ Clean up spills as quickly as possible
- ▶ Report any instances on an Incident Report



# Emergency: who to contact



If you do have an emergency, who should you contact:

- ▶ If there is an injury, call the sister's station for medical assistance
- ▶ If there is a significant spill, call Fire & Rescue NSW as they are equipped to deal with chemical spills
- ▶ If there is a small spill, use a Spill Kit to clean it up
- ▶ Use an Incident Report to report spills and give it to your manager
- ▶ Each chemical supplier has an emergency number you can contact for more information - obtain the phone number from the SDS



# Summary

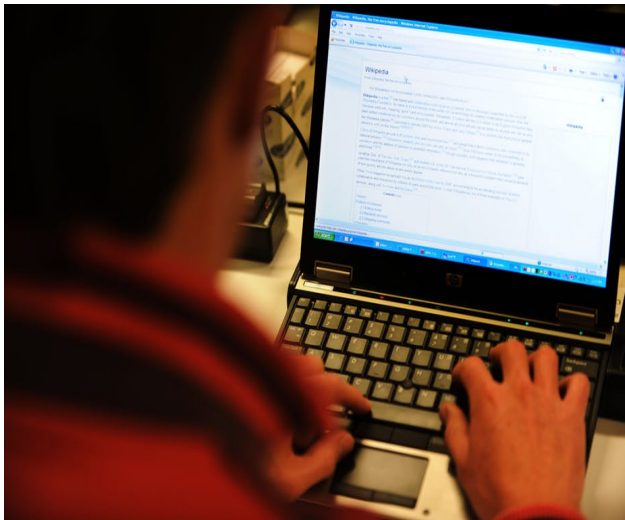


This module has covered many aspects of working safely with chemicals. You also now understand it is everyone's responsibility to ensure safety in the workplace. If YOU take a more informed chemical handling approach, you help to minimise the potential risks posed by the products you use.

Let's review some key points:

- ▶ Know what you are using and how to use it
- ▶ Read labels and SDS for each chemical - they provide vital safety information you need
- ▶ Unlabelled chemical containers must not be used - report it to your manager
- ▶ Know the risks and how to avoid them
- ▶ Follow safe work practices
- ▶ Use chemicals only as directed
- ▶ If you are not sure, always ask!

# ASSESSMENT



You have now completed this training module.

You will be asked 20 randomly selected multiple choice questions.

The pass mark is 90%.

To access the assessment, [click here](#).