







# How do chemicals enter our body?

■ Inhalation of chemical fumes or vapours through the respiratory tract into the body, particularly in poorly ventilated areas.

Skin absorption if suitable gloves and protective clothing are not used. Chemicals could also hurt unprotected skin.

 Chemicals may be swallowed when eating or smoking with contaminated





腐蝕性

FLAMMABLE 易燃

## What are the health hazards of chemicals?

Different types of chemicals may cause different adverse health effects through acute (e.g. spillage) or prolonged exposure, as follows:



#### Eyes

- Burns
- Inflammation with reddening, swelling, tears



#### **Nervous System**

 Headache, dizziness, drowsiness, neuropathy



#### Respiratory System

Irritation with coughing



#### **Other Organs**

 Impaired liver and kidney functions



### Skin

- Burns
- Inflammation with reddening, itchiness, dryness, cracks

## **CAUTION**

- Mixing chemicals can cause explosion or emission of toxic gas!
- Improper use or storage of flammable chemicals can cause explosion or fire!

EXPLOSIVE 爆炸性

# How could we protect our health when handling chemicals?

- Aviod using hazardous chemicals whenever possible. If it is impracticable to do so, the least hazardous chemicals should be chosen.
- Use chemicals in well-ventilated areas only. Use ventilation equipment to remove airborne contaminants at source, if necessary.
- Fully understand the safety information and follow the necessary precautionary measures. Ensure you have received adequate training, information, instructions and supervision from employers.

• Ensure all chemical containers have been securely affixed with suitable labels.

Read the labels carefully to understand the contents thoroughly before using the chemicals. Follow the correct methods of use and safety instructions.





### A chemical label should show:



of the label contains a — symbol indicating the hazard classification.



The right side of the label contains information about the name of substance, particular risks and safety precautions.

A typical label of bleaching solution

# Safety hints for handling chemicals



Don't mix chemicals to increase their cleansing effectiveness.

Mixing chemicals may cause explosion or emission of toxic gas.

For example, mixing acid with bleaching solution will liberate toxic chlorine gas.

Don't mix cleansing chemicals

 Wear suitable personal protective equipment.
 For example, gloves, rubber boots and aprons.
 If there is a risk of spillage or inhalation of chemicals, suitable face shield or eye protector and respirator should be used respectively.



- Cover all chemical containers securely. This is important for preventing leakage or spillage due to accidental overturning of the containers.
- Store incompatible chemicals separately. For example, bleaching solution and stone washer must not be stored together.
- Avoid storing excessive quantities of chemicals in the work area.
- Do not eat or smoke in areas where chemicals are used or stored.
- Wash hands, arms and face immediately after work or before eating. This is important for preventing any chemicals residues from entering the body through the skin or swallowing.
- Seek advice from supervisors if in doubt.





# **Enquiries**

For enquiries about this pamphlet or advice on occupational health and hygiene matters, please contact the Occupational Safety and Health Branch of the Labour Department through:

Telephone : 2852 4041

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E-Mail : enquiry@labour.gov.hk

Information on the services offered by the Labour Department and on major labour legislation can also be found on our website http://www.labour.gov.hk.

Information on the services provided by the Occupational Safety and Health Council can be obtained through its hotline 2739 9000 and website http://www.oshc.org.hk.

# **Complaints**

If you have any complaints about unsafe workplaces and practices, please call the Labour Department's Occupational Safety and Health complaint hotline, 2542 2172. All complaints will be treated in the strictest confidence.

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