



ChemiSure

COSHH Awareness



Why you need to know about COSHH



Chemicals are an ever present feature of everyday life, some natural, some synthetic. Many are harmless but some are extremely hazardous.

Hazardous substances may be a single material or maybe a combination of materials that become hazardous when mixed

Some substances may become hazardous as a result of processes in the workplace.

Why you need to know about COSHH



Annually, thousands of workers are made ill because of hazardous substances, contracting diseases such as asthma, cancer, skin diseases etc...

These diseases cost many millions of pounds to:

- People – who may lose their jobs
- Society in disability payments, treatment and drugs
- Industry – replacing skilled, trained workers

Why you need to know about COSHH

Case Study 1

Workers at a company in Bristol were exposed to hazardous chemicals over a 4 year period resulting in them developing a form of dermatitis (skin disease). One of the workers suffered skin cracking, blisters and weeping wounds for 4 years as a result of the dermatitis.

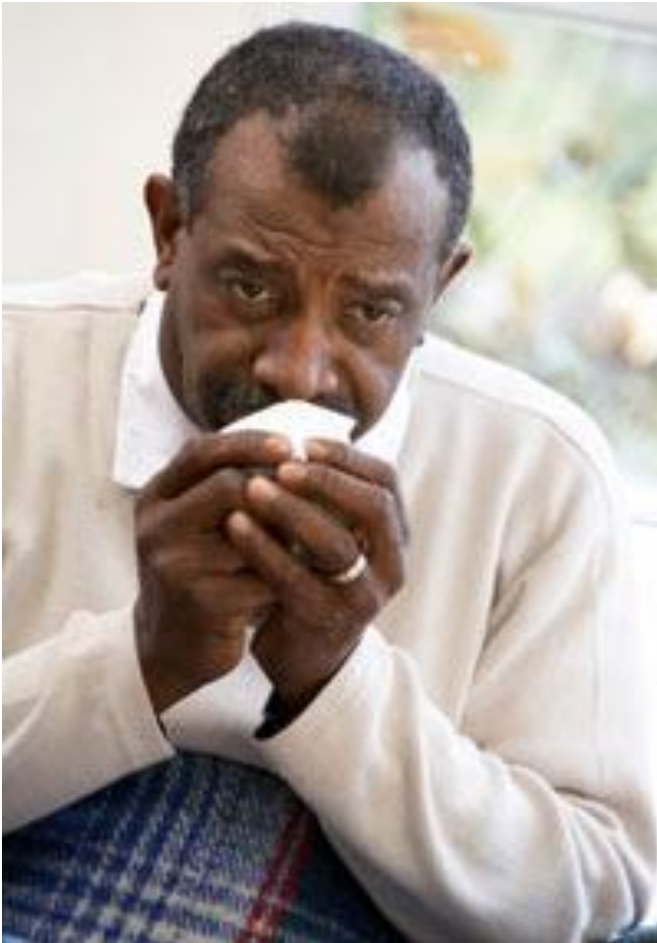
The company was fined £100,000 and ordered to pay £30,000 in costs.

Case Study 2

A school cook, in her forties, who had been working with flour in a poorly ventilated room, developed severe asthma that resulted in her barely being able to walk and sleep sitting upright. She was forced to retire early due to ill health.

The Courts awarded compensation of £200,000

Why you need to know about COSHH



Despite the compensation pay-outs, no amount of money will ever be able to recover the workers

HEALTH

Hazardous Substances in the Workplace

So, which chemicals cause harm to us?

Potentially, all of them.....if you don't know how to use them properly

Some examples of occupations at risk:

WELDING • CATERING • DECORATING

CLEANING • HEALTHCARE • CONSTRUCTION

WORKING WITH OILS



Hazardous Substances in the Workplace

Hazardous substances come in many forms:

- Chemicals
- Fumes
- Dust
- Vapours
- Mists
- Gases
- Biological agents (bacteria)

Radioactive materials, lead & asbestos have their own sets of specific regulations.

All remaining hazardous materials are dealt with under the Control of Hazardous Substance Regulations – COSHH

Hazardous Substances in the Workplace

4 main routes into the body:

- **Inhalation** (breathed in through nose or mouth)
- **Ingestion** (taken through the mouth and swallowed)
- **Absorption** (passed through the skin into the bloodstream)
- **Injection** (passed through broken skin or piercing the skin – needle or stick injury)

Hazardous Substances in the Workplace

Once the hazard has entered the body it can cause illnesses including:

- Cancer
- Lung Disease
- Respiratory Conditions (such as asthma)
- Skin problems (such as dermatitis)
- Nervous System Disorders

Identifying Hazardous Substances

Labelling

In 2015 a new regulation the Classification, Labelling and Packaging of Substances was introduced known as the CLP Regulation.

Previously labels were orange and black they have now been replaced with white, black and red pictograms.



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Identifying Hazardous Substances



Oxidising



Gas Under
Pressure



Flammable



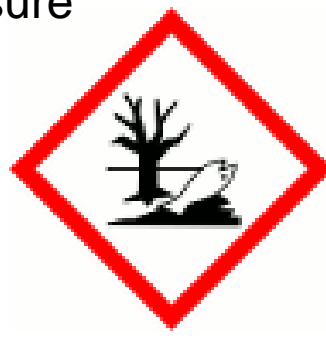
Explosive



Corrosive



Acute Toxicity



Hazardous to
The Environment



Serious Health
Hazard



Health Hazard

Identifying Hazardous Substances

Chemical Safety Data Sheets

Chemical safety data sheets are required by the Registration, Evaluation, Authorisation of Chemicals Regulation (REACH). Suppliers of chemicals must provide current, relevant data sheets if a substance is dangerous to supply.

Safety data sheets will provide information on chemicals so that an adequate risk assessment can be carried out, including safe handling, the hazards presented by the substance, storage, emergency measures in case of an incident with the product etc...

MATERIAL SAFETY DATA SHEET
According to REACH-directive 1907/2006

PRODUCT NAME: XXX

1. IDENTIFICATION OF THE SUBSTANCE OR PREPARATION AND THE COMPANY
Product label name: Ethylenediaminetetraacetic, tetrasodium salt
Supplier: XXX
Address: XXX
Telephone number: 1234567890
Emergency telephone: 1234567890 (Fax: 1234567890)
Intended use: chelating agent

2. HAZARDS IDENTIFICATION
Harmful if swallowed. Irritating to eyes and skin.

3. COMPOSITION/INFORMATION ON INGREDIENTS
Information on hazardous ingredients:
Composition / Information on ingredients:
Chemical name: Ethylenediaminetetraacetic tetrasodium salt
CAS-no. 64-02-8 % w/w min. 86
Sodium hydroxide 1310-73-2 0.5-2
Symbol(s) Xn⁺, R22, R36
C⁺, R35
Risk-phrase(s) Harmful if swallowed
Irritating to eyes
Causes severe burns

4. FIRST AID MEASURES
Symptoms and effects: No typical and effects known.
First aid: In all cases of doubt, or when symptoms persist, seek medical attention.
General: Dust may be irritating to the respiratory tract and cause symptoms or bronchitis. Move to fresh air. If symptoms persist, seek medical advice. Take off contaminated clothing immediately. Wash immediately with soap and water. Launder clothes before reuse.
Inhalation: Rinse thoroughly with plenty of water. Eyelids should be held away from the eyeball to ensure thorough rinsing. Seek medical advice.
Skin: Rinse mouth, give water to drink. Do NOT induce vomiting. Seek medical advice after significant exposure.
Eyes: No additional information available
Ingestion: No additional information available
Advice to physician: ³ Harmful ¹⁰ Corrosive



Legal Requirements under COSHH

COSHH regulations place a number of responsibilities on both the employee and employer.

The employer must:

- Assess the risks posed by hazardous substances suitably and sufficiently
- Implement control measures to regulate hazardous substances and ensure they are maintained adequately
- Provide employees with information, instruction and training that is suitable and sufficient



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Legal Requirements under COSHH

The employer must also:

- Draw up emergency procedures
- Provide health surveillance where necessary
- Ensure workplace exposure limits (WELs) are not exceeded
- Carry out a COSHH assessment

Employees must:

- Use any hazardous substances safely and according to instruction given
- Read information and signs displayed
- Report any deficiencies in the control measures



Legal Requirements under COSHH

Employees must also:

- Wear and store PPE as instructed to do so
- Maintain a high level of personal hygiene
- Use facilities provided for washing
- Remove any clothing that may cause contamination before eating



Important Considerations

- Use only approved chemicals
- Never mix chemicals
- Never decant chemicals unless the container is properly labelled
- Always store chemicals safely separately from food
- Only use chemicals for the purpose they are intended
- Always wear protective clothing
- Keep COSHH information in a safe and accessible place
- ALWAYS follow manufactures instructions
- If you are ever unsure check the product information



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