Chemicals

Be Chem Safe

Chemicals

Chemicals are everywhere and are an essential part of our daily lives. With over 5.7 million known chemicals and 3000 of these are comprised in the workplace, it is impossible to avoid them.

Chemicals can take the form of

• Gas • Liquid • Dust • Vapour • Mist • Solid • Fume

Examples of chemicals include resins, paints, adhesives, silica dust & cleaners.

Some chemicals pose a threat to human health and/or the environment. These are referred to as Hazardous Substances

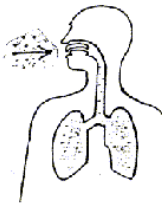
Different ways Chemicals are Hazardous:

- Carcinogenic (cancer causing)
- Poisoning (toxic)
- Irritating
- Sensitising
- Explosive
- Flammable
- Teratogenic (causing birth defects)
- Asphyxiating
- Corroding (causing visible destruction or irreversible alterations in human skin tissue)

Routes of Chemical Exposure

Inhalation - your lungs if you breath in fumes, vapours, gas, mists or dust.

Dusts – silica, coal, asbestos, lead, cotton, wood cement
Mists – acid mists, chrome plating
Gases – chlorine, sulphur dioxide, ethylene oxide, ozone
Fumes – smoke, metal fume from welding
Vapours – chlorinated and aromatic solvents, amines, ethers, alcohols


INHALATION

Skin Contact - your skin if liquid or dust touches or spills on you.

Direct absorption through the skin – pesticides, phenol
Action on eye and mucous membranes – acids, irritating effect of vapours
Corrosive action on the skin – acids, alkalis, phenols
Solvent defatting of skin – toluene,
Allergic action on the skin


SKIN CONTACT

Ingestion - your mouth if you eat after handling chemicals, or if you accidentally swallow a chemical


INGESTION

To ensure the Health and Safety of yourself and others make sure you are aware of the following chemical safety tips:

1. **Storage of chemicals** – ensure the right chemicals are stored in the proper locations, e.g. dangerous goods to be stored in an appropriate dangerous goods storage area

2. **Located chemical MSDS** - When using chemicals make sure you located the MSDS. The label of a chemical can also provide guidance on general health and safety information.

3. **Read the MSDS** - When reading the MSDS, be familiar with
    a. What are the health hazards?\
    b. What are the precautions that need to be taken?
    c. What are the First Aid procedures?
    d. What are the Emergency procedures?

4. **Be aware of the ChemAlert system**

    Green – Low Hazard Chemical
    Amber – Moderately Hazardous Chemical
    Red – Highly Hazardous Chemical

5. **Chemical Approval -** Ensure the chemical you are using is approved for use at Pilbara Iron. *Contact your local Health and Safety Advisor for more information on the Pilbara Iron Chemical Approval System.*

6. **At your site, ensure:**

    a. **Labelling – make sure all chemicals are correctly labelled**
    b. **Disposals – ensure chemicals are disposed in the appropriate manner**
    c. **Spills – ensure all spills are reported. No matter how small.**

IF YOU HAVE ANY QUERIES REGARDING CHEMICALS SEE YOURSITE SAFETY REP OR HEALTH AND SAFETY ADVISORS!