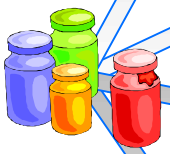
Solvents



- Routes of Exposure
  - inhalation of vapour
  - ingestion of liquid
  - skin contact with liquid
- Sources of Exposure
  - production and refining
  - transport and storage
  - dispensing from larger to smaller containers
  - use as chemcal intermediates
  - use as process solvents
  - mixing and packaging of solvent-based products
  - use of comsumables solvent products
  - plant emissions

- Effects of Exposure
  - respiratory system
    - irritation to the eyes & mucous membranes in the upper respiratory tract
  - periheral nervous system
    - results in loss of sensory and motor functions recovery can be slow ever after cessation
  - central nervous system
    - Acute exposure can produce the following systems
      - headache
      - nausea
      - dizziness
      - drowsiness
  - liver and kidneys
    - damage to the liver cells or chnages to the fatty tissue are cuased by various solvents including alcohol Solvents that cause kidney damage include:
      - methyl alcohol
      - carbon tetrachchloride
      - chloroform
      - toluene
  - Cardio-vascular system
    - Damage to the arteris. Some hydrocarbons are thought to cause cardiac arrthymias & and some gycols destroy red & white blood cells
  - reproduction system
    - can cause testicular atrophy in men and toetoxicity & teratogenicity in women (child berth defects)
  - skin
    - defatting agents can casue skin irritation and dermatitus
- Confined spaces
  - othe enclosed vessels
  - pits
  - confined spaces where solvents may have leaked
  - tanks

© On Safe Lines Consultancy Ltd, 2006

Concept Design By - BGW v1.0
www.onsafelines.com