



## Environmental Management Consulting, Inc.

### Hazard Communication/ Employee Right-To-Know

Employer is required to inform employees about hazardous chemicals in their workplace

#### Hazardous chemicals

- Any chemical that exhibits any hazardous properties to human health or the environment
- These can be broken down into:
  - Health Hazards
    - Carcinogens (Benzene)
    - Corrosives (Acids, Bases)
    - Toxics (Mercury)
    - Irritants (Bleach)
    - Sensitizers (New carpet odor)
  - Physical Hazards
    - Flammables/Combustibles (Gasoline)
    - Compressed gases (Acetylene)
    - Flammable solids (Sodium)
    - Water reactives (Potassium)
    - Oxidizers (Oxygen)

#### Routes Of Entry

- Inhalation:
  - Mists, fumes, vapors, fibers, smoke, dust.
- Skin Absorption:
  - Chemicals like mercury, gasoline solvent, thinners
- Ingestion:
  - Ingest through chemicals on food or drink that you have contacted
  - Wash hands and never keep food or drinks in areas with chemicals

### Material Safety Data Sheets (MSDS)

- Are required for all chemicals
- Must be readily available to access in case of emergency
- Must be kept by employer for 30 years after the product is last used
- All MSDS's must contain the same information but are not required to be in the same format/order (recommended format/order by ANSI & ISO)
- Know the location of and how to obtain an MSDS's in case of emergency situations

#### Sections of a MSDS (ANSI/ISO recommended)

**Section 1:** Product and Company Identification

**Section 2:** Composition of and Information on Ingredients

**Section 3:** Hazards Identification

**Section 4:** First Aid Measures

**Section 5:** Fire Fighting Measures

**Section 6:** Accidental Release Measures

**Section 7:** Handling and Storage

**Section 8:** Exposure Controls and Personal Protection

**Section 9:** Physical and Chemical Properties

**Section 10:** Stability and Reactivity

**Section 11:** Toxicological Info.

**Section 12:** Ecological Information

**Section 13:** Disposal Consideration

**Section 14:** Transport Information

**Section 15:** Regulatory Info.

**Section 16:** Other Information

#### Material Labeling

All chemical containers must have:

- Product or material name
- Hazards of product or material
- Manufacturer (if possible)

### Labeling Systems

- National Fire Protection Association (NFPA) - most common and recognized:
  - Blue = Health
  - Red = Fire
  - Yellow = Reactivity
  - White = Specific Hazard
- Hazardous Material Identification System (HMIS):
  - Blue = Health
  - Red = Fire
  - Yellow = Reactivity
  - White = PPE (A-K, X)
- Same Numbering System
  - 0 = No Hazard
  - 1 = Minimal Hazard
  - 2 = Medium Hazard
  - 3 = High Hazard
  - 4 = Extreme Hazard

### DCOMM Violations

- What is an MSDS?
- Where are your MSDS's?
- Can you read an MSDS?
- Chemicals properly labeled?
- Chemicals properly stored?

### Do and Don't

- Do have MSDS for all chemicals/products
- Do know location of MSDS's
- Do understand how to read and interpret MSDS
- Do have proper labels on all chemical containers
- Do report any/all spills
- Don't bring in chemicals/products from home/store
- Don't transfer products into unlabeled containers
- Don't attempt spill cleanup of unknown products
- Don't store food or drinks with chemicals