## Chemical Labels – NFPA

**Every person who works with or around chemicals must understand the Labeling System**

**Hazards -** four basic hazard classifications for chemicals

**Health Hazards** are those that can affect the immediate or long term health of an employee if exposed to a specific chemical. Acute effects of exposure are those that present symptoms when exposure occurs, such as when skin is exposed to an acid. Delayed or long term health effects can also occur from chemical exposure, such as cancer. Health effects for any given chemical will depend on the toxicity, duration of exposure and amount of exposure.

**Fire Hazard** ratings range from *non-flammable* to *highly flammable*. The NFPA ratings are based on the material flashpoint - the temperature at which the chemical *vapors* will ignite.

**Reactivity** ratings describe the hazards of the material stability - some chemicals will explode or react violently if exposed to heat or shock

**Other Hazards** - special markings are required if the material is radioactive, an oxidizer, acid or base or will react when exposed to other materials.

## Hazard Controls include:

- Labeling of all chemicals
- Proper chemical storage containers & areas
- Segregation of incompatible chemicals
- Personal Protective Equipment
- Use of chemicals by training and authorized employees

Use of minimum amount necessary
Bonding & Grounding of flammable liquid containers

## Fire Hazards

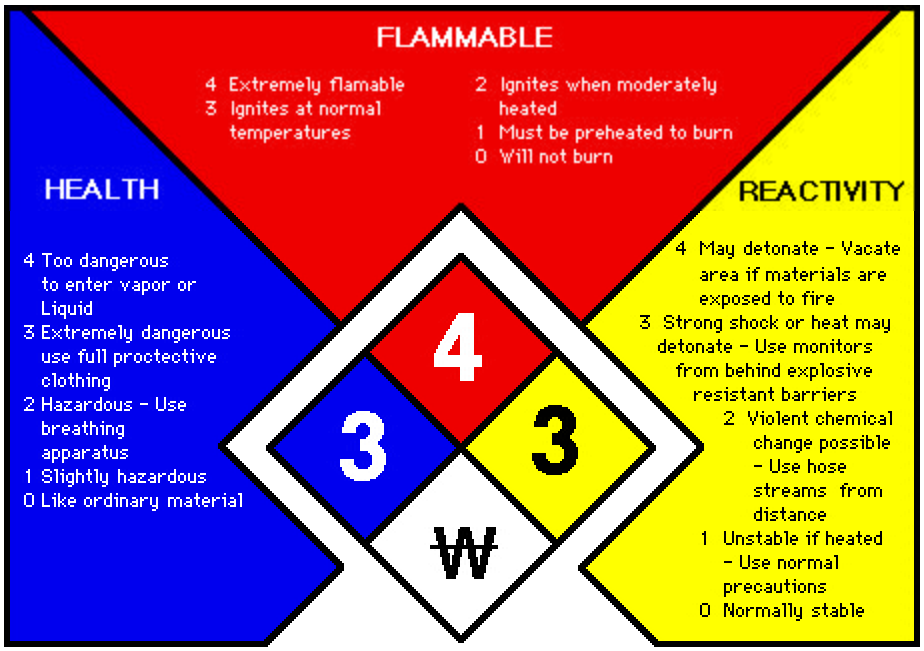
**Flash Points**
**4 - Below 73 $^{0}$ F**
**3 - Below 100 $^{0}$ F**
**2 - Above 200 $^{0}$ F**
**1 - Will Not Burn**

## Health Hazards

**4 - Deadly**
**3 - Extreme Danger**
**2 - Hazardous**
**1 - Normal Material**

## Reactivity

**4 - May Detonate**
**3 - Shock or heat may cause detonation**
**2 - Violent chemical change**
**1 - Unstable if heated**
**0 - Stable**




## Specific Hazards

**OXY - Oxidizer**
**ACID - Acid**
**ALK - Alkali**
**CORR - Corrosive**

**W - Use No Water**

**- Radiation Hazard**