SAF130 Hazard Communication 2012 Hazard Definitions

SPECIFIC HAZARD CRITERIA

- Simple asphyxiant
  - **displaces oxygen** in the ambient atmosphere, and can thus cause oxygen deprivation in those who are exposed, leading to unconsciousness and death
- Pyrophoric gas
  - a chemical in a gaseous state that will **ignite spontaneously** in air at a temperature of 130 degrees F (54.4 degrees C) or below
- Combustible dust – covered separately, but **not specifically defined**
- Hazard Not Otherwise Classified (HNOC)
  - Adverse **physical or health effect** identified through evaluation that **does not meet the specified criteria** for the physical and health hazard classes
  - HNOC Definition added to ensure that hazards previously covered by HCS continue to be covered.

HEALTH HAZARDS

- Acute Toxicity – Adverse effects from single dose or multiple doses within 24 hrs (4 hrs inhalation)
- Skin Corrosion – Irreversible damage to the skin
- Skin Irritation – Reversible damage to the skin
- Respiratory/Skin Sensitization – leads to hypersensitivity or allergic response
- Reproductive Toxicity – adverse effects on sexual function, fertility, or offspring development
- Specific Target Organ Toxicity, Single Exposure –
  - Skin, eyes, liver, CNS, …
  - Reversible or Irreversible
  - Immediate or delayed
  - Single or multiple adverse effects
- Specific Target Organ Toxicity, Repeated Exposure –
  - Same except repeated exposure required for adverse effect to present
- Aspiration Hazard –
  - Entry of liquid or solid into nasal cavity, trachea, or lower respiratory system
- Aspiration Toxicity –
  - Includes severe acute effects such as chemical pneumonia, pulmonary injury, or death

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PHYSICAL HAZARDS

- Explosives – An explosive chemical is a solid or liquid chemical which is in itself capable by chemical reaction of producing gas at such a temperature and pressure and at such a speed as to cause damage to the surroundings. Pyrotechnic chemicals are included even when they do not evolve gases.
- Flammable gases – Flammable gas means a gas having a flammable range with air at 20°C (68°F) and a standard pressure of 101.3 kPa (14.7 psi)
- Flammable aerosols – an aerosol (spray) with a flammable component. e.g. insect repellants
    - Aerosol means any non-refillable receptacle containing a gas compressed, liquefied or dissolved under pressure, and fitted with a release device allowing the contents to be ejected as particles in suspension in a gas, or as a foam, paste, powder, liquid or gas.
- Oxidizing gases – causes or contributes to combustion more than air does
- Gases under pressure – contained under pressure of 29psig or greater
    - Compressed
    - Liquefied
    - Dissolved
    - Refrigerated
- Flammable liquids – flash point <199.4 F, 93C
- Flammable solids – readily combustible or may cause fire through friction
- Self-reactive chemicals – thermally unstable
- Pyrophoric liquids/solids – ignites on contact with air
- Self-heating chemicals – liable to self-heat on contact with air
- Chemicals which, in contact with water, emit flammable gases
- Oxidizing liquids – not necessarily combustible but may contribute oxygen to combustion
- Oxidizing solids – not necessarily combustible but may contribute oxygen to combustion
- Organic peroxides – Organic peroxide means a liquid or solid organic chemical which contains the bivalent -0-0- structure and as such is considered a derivative of hydrogen peroxide, where one or both of the hydrogen atoms have been replaced by organic radicals.
    - May be unstable
    - May be liable to explosive detonation
    - May burn rapidly
    - May be sensitive to impact or friction
    - May react dangerously with other chemicals
- Corrosive to metals – by chemical action materially damage or destroy metals