

## HAZARDOUS LOCATIONS DEFINITIONS

**HAZARDOUS LOCATIONS** - Areas where the possibility of explosion or fire exists because of the presence of flammable gases, vapors, or dust etc.

**DIVISION 1** - Locations where the hazard is expected to be present during normal production operations, or during frequent maintenance and repair activities.

**DIVISION II** - Locations where the hazards would only exist as a result of an accident or other abnormal event such as a rupture or spillage.

**CLASS I** - Areas where sufficient quantities of flammable gases or vapors exist in the air to be explosive or ignitable.

- Offshore and land based drilling rigs, petroleum exploration and testing facilities.
- Petroleum refineries, gasoline storage and dispensing areas.
- Industrial firms that use flammable liquids in dip tanks for parts cleaning or other operations.
- Petrochemical companies that manufacture chemicals from gas and oil.
- Dry cleaning plants where vapors from cleaning fluids can be present.
- Aircraft hangars and fuel servicing areas.
- Utility gas plants and operations involving storage and handling of liquefied petroleum gas or natural gas.

**GROUP D** - Gases or vapors with specific explosive characteristics grouped together including:

|                   |                     |                   |                |
|-------------------|---------------------|-------------------|----------------|
| Acetone           | Cyclohexane         | Iso Butyl Alcohol | Propane        |
| Acrylonitrile     | Decane              | Isooctane         | Propylene      |
| Ammonia           | Ethane              | Isoprene          | Propyl Acetate |
| Amyl Acetate      | Ethylene Dichloride | Methane           | Styrene        |
| Amyl Alcohol      | Ethyl Acetate       | Methanol          | Toluene        |
| Benzene           | Ethyl Alcohol       | Methyl Acetate    | Vinyl Acetate  |
| Blast Furnace Gas | Ethyl Methyl Ketone | Methyl Alcohol    | Vinyl Chloride |
| Buta - 1:3 Diene  | Ethyl Nitrite       | Naphtha           | Xylene         |
| Butane            | Heptane             | Natural Gas       |                |
| Butyl Acetate     | Hexane              | N-Butyl Alcohol   |                |
| Carbon Monoxide   |                     | Pentane           |                |

**CLASS II** - Areas which are made hazardous by the existence of combustible dusts.

- Coal preparation plants and other carbon handling or processing areas
- Grain elevators, flour and feed mills.
- Plants that manufacture, use or store magnesium or aluminum powders.
- Plants that have chemical or metallurgical processes, producers of plastics, medicines and fireworks, etc.
- Producers of starch or candies.
- Spice grinding plants, sugar plants and cocoa plants.

**GROUP E** - Powdered metals such as aluminum and magnesium, and other metal dusts with similar characteristics.

**GROUP F** - Dusts such as carbon black, coke, and coal dust.

**GROUP G** - Dusts, including flour, starch, spices and grain dust.