Hazardous Location Definitions (U.S. and Canada)

Class I Locations in which flammable gases or vapors exist or may be present in the air in quantities sufficient to produce explosive or ignitable mixtures. Class II Locations that are hazardous because of the presence of combustible dust. Class III Locations that are hazardous because of the presence of easily ignitable fibers or flyings, but in which such fibers or flyings are not likely to be suspended in the air in quantities sufficient to produce ignitable mixtures. Division 1 Locations in which hazardous concentrations in the air exist continuously, intermittently, or periodically under normal operating conditions. Division 2 Locations in which hazardous materials are handled, processed or used, but in which they are normally confined within closed containers or closed systems from which they can escape only in case of accidental rupture or breakdown. Group A Atmospheres containing acetylene. Group B Atmospheres containing hydrogen, fuel and combustible process gases containing more than 30% hydrogen by volume, or gases or vapors of equivalent hazard such as butadiene, ethylene oxide, propylene oxide and acrolein. Group C Atmospheres such as ethyl ether, ethylene, acetaldehyde, cyclopropane, or gases or vapors of equivalent hazard. Group D Atmospheres such as acetone, alcohol, ammonia, benzene, butane, cyclopropane, ethylene dichloride, gasoline, hexane, lacquer solvent vapors, methane, natural gas, naphtha, propane, xylene, or gases or vapors of equivalent hazard. Group E Atmospheres containing combustible metal dusts, including aluminum, magnesium, and their commercial alloys, and other combustible dusts with similarly hazardous characteristics. Group F Atmospheres containing combustible carbonaceous dusts, including carbon black, charcoal and coal. Group G Atmospheres containing other combustible dusts, such as chemical, agricultural or plastic dusts.