Hazardous Atmospheres (for reference only)

Hazardous atmospheres are divided into three general classes and two divisions:
CLASS I: Flammable Gases or Vapors
CLASS II: Combustible Dusts
CLASS III: Ignitable Fibers or Flyings
DIVISION 1: Hazard exists under normal conditions.
DIVISION 2: Hazardous material is handled, processed or stored. Hazard
is not normally present, but may be released due to accident or equipment malfunction.

CLASS I:
Flammable Gases or Vapors
CLASS I, GROUP A: (d)
acetylene

CLASS I, GROUP B: (d)
acrolein (inhibited)
arsine
butadiene
ethylene oxide
hydrogen
manufactured gases containing more than 30% hydrogen by volume
propylene oxide
propylnitrate

CLASS I, GROUP C: (c, d)
acetaldehyde
allyl alcohol
n-butyraldehyde
carbon monoxide
crotonaldeghyde
cyclopropane
diethyl ether
diethylamine
epichlorohydrin
ethylene
ethylenimine
ethyl mercaptan
ethyl sulfide
morpholine
2-nitropropane
tetrahydrofuran
unsymmetrical dimethyl hydrazine
(UMDH 1, 1-dimethyl hydrazine)

CLASS I, GROUP D: (c, d)
acetic acid
acetone
acrylonitrile
ammonia
benzene
butane
1-butanol (butyl alcohol)
2-butanol (secondary butyl alcohol)
n-butyl acetate
isobutyl acetate
di-isobutylene
ethane
ethanol (ethyl alcohol)
ethyl acetate
ethyl acrylate (inhibited)
ethylene diamine (anhydrous)
ethylene dichloride
ethylene glycol monomethyl ether
gasoline
heptanes
hexanes
isoprene
isopropyl ether
mesityl oxide
methane (natural gas)
methanol (methyl alcohol)
3-methyl 1-butanol (isoamyl alcohol)
methyl ethyl ketone
2-methyl 1-propanol (isobutyl alcohol)
2-methyl 2-propanol (teriary butyl alcohol)
petroleum naptha
pyridine
octanes
pentanes
1-pentanol (amyl alcohol)
propane
1-propanol (propyl alcohol)
2-propanol (isopropyl alcohol)
propylene
styrene
toluene
vinyl acetate
vinyl chloride
xylenes

CLASS II:
Combustible Dusts (c)
CLASS II, GROUP E (c, d)
Atmospheres containing metal dust, including aluminum, magnesium, and their commercial alloys, as well as other metals of similarly hazardous characteristics with a resistivity of 100 ohms per centimeter.

CLASS II, GROUP F (c, d)
Atmospheres containing carbon black, charcoal, coal or coke dusts that have more than 8 percent total volatile material, or atmospheres containing these dusts sensitized by other materials so that they present an explosion hazard. They will also have a resistivity greater than 100 ohms per centimeter and equal to or less than 100 megohms per centimeter.

CLASS II, **GROUP G** (c, d)
Atmospheres containing flour, starch or grain as well as combustible plastics or chemical dusts having resistivity greater than 1 megohm per centimeter.

CLASS III:
Ignitable Fibers or Flyings (c, d)
Atmospheres containing parts of rayon, cotton and other textiles. Combustible fiber manufacturing and processing plants such as cotton gins, cottonseed mills, flax processing plants, clothing manufacturing plants, sawmills and other woodworking locations.

Easily ignitable fibers including rayon, cotton (including cotton linters and cotton wastes), sisal or henequen, istle, jute, hemp, tow, cocoa, oakum, baled waste kapok, Spanish moss, excelsior, sawdust, wood chips and other similar materials.

(d) Rice Lake Weighing Systems' intrinsically safe systems may be used in these atmospheres.