

Codes & Certifications

Hazardous Location Chemicals by Groups

GAS

GROUP A — ATMOSPHERES

acetylene

GROUP B — ATMOSPHERES

acrolein (inhibited) (2)
arsine butadiene (1)
ethylene oxide (2)
formaldehyde (gas)
hydrogen manufactured
gasses containing more
than 30% hydrogen (by volume)
propylene oxide (2)
propyl nitrate

GROUP C — ATMOSPHERES

acetaldehyde	hydrogen sulfide
allyl alcohol	isobutyraldehyde
butyl mercaptan	isopropyl glycidyl ether
n-butyraldehyde	methylacetylene
carbon monoxide	methylacetylene-propadiene
crotonaldehyde	(stabilized)
cyclopropane	methyl ether
dicyclopentadiene	methyl formal
diethyl ether	methyl mercaptan
diethylamine	monomethyl hydrazine
di-isopropylamine	morpholine nitroethane
dimethylamine	nitromethane
1,4-dioxane	2-nitropropane propionalde-
di-n-propylamine	hyde
epichlorohydrin	n-propyl ether
ethylene	tetrahydrofuran
ethylenimine	triethylamine
ethyl mercaptan	unsymmetrical dimethylhydra-
n-ethyl morpholine	zine
ethyl sulphide	(UDMH 1,1-dimethyl
hydrogen cyanide	hydrazine)
hydrogen selenide	valeraldehyde

GROUP D — ATMOSPHERES

acetic acid (glacial)	ethylenediamine (anhydrous)	2-methyl-1-propanol (isobutyl alcohol)
acetone	ethylene dichloride	2-methyl-2-propanol (tertiary butyl alcohol)
acetonitrile	ethylene glycol monomethyl ether	naphtha (petroleum)
acrylonitrile	ethyl formate	nonane
allyl chloride	gasoline	nonene
ammonia (3)	heptane	octane
n-amyl acetate	heptene	octene
sec-amyl acetate	hexane	pentane
benzene	2-hexanone	1-pentanol (amyl alcohol)
butane	hexenes	2-pentanone
1-butanol (butyl alcohol)	isoamyl acetate	1-pentene
2-butanol (secondary butyl alcohol)	isoamyl alcohol	petroleum naphtha (4)
n-butyl acetate	isobutyl acrylate	propane
sec-butyl acetate	isoprene	1-propanol (propyl alcohol)
butylamine	isopropyl acetate	2-propanol (isopropyl alcohol)
butylene	isopropylamine	n-propyl acetate
chlorobenzene	isopropyl ether	propylene
chloroprene	liquefied petroleum gas	propylene dichloride
cyclohexane	mesityl oxide	propylene oxide (2)
cyclohexene	methane (natural gas)	pyridine
cyclopropane	methanol (methyl alcohol)	styrene
1,2-dichloroethylene	methyl acetate	toluene
1,3-dichloropropene	methyl acrylate	tripropylamine
di-isobutylene	methylamine	turpentine
ethane	methylcyclohexane	vinyl acetate
ethanol (ethyl alcohol)	methyl ethyl ketone	vinyl chloride
ethyl acetate	methyl formate	vinylidene chloride
ethyl acrylate (inhibited)	methyl isobutyl ketone	xylene
ethylamine	methyl isocyanate	
ethyl benzene	methyl methacrylate	
ethyl chloride		

DUST

GROUP E — ATMOSPHERES Containing combustible metal dusts regardless of resistivity, or other combustible dusts of similarly hazardous characteristics having resistivity of less than 10³/4 ohm-centimeter.

GROUP F — ATMOSPHERES Containing carbon black, charcoal, coal or coke dusts which have more than 8 percent total volatile material (carbon black per ASTM D1620; charcoal, coal and coke dusts, per ASTM D271) or atmospheres containing these dusts sensitized by other materials so that they present an explosion hazard, and having resistivity greater than 10 ohm-centimeter but equal or less than 108 ohm-centimeter.

GROUP G — ATMOSPHERES Containing combustible dusts having resistivity of 105 ohm-centimeter or greater.

- (1) Group D equipment shall be permitted for this atmosphere if such equipment is isolated in accordance with Section 501-5(a) by sealing all conduit 1/2-inch or larger.
- (2) Group C equipment shall be permitted for this atmosphere if such equipment is isolated in accordance with Section 501-5(a) by sealing all conduit 1/2-inch or larger.
- (3) For classification of areas involving ammonia atmosphere see Safety Code for Mechanical Refrigeration (ANSI/ASHRAE 15-1978) and Safety Requirements for the Storage and Handling of Anhydrous Ammonia (ANSI/CGA G2, 1-1972).
- (4) Petroleum Naphtha is a saturated hydrocarbon mixture whose boiling range is 20° to 135°C. It is also known as benzine, ligroin, petroleum ether, and naphtha.