TABLE 500–2(c) CHEMICALS BY GROUPS

Group A Atmospheres

acetylene

Group B Atmospheres

butadiene[1]
ethylene oxide[2]
hydrogen
manufactured gases containing more than 30% hydrogen (by volume)
propylene oxide[2]

Group C Atmospheres

acetaldehyde
cyclopropane
diethyl ether
ethylene
isoprene
unsymmetrical dimethyl hydrazine (UDMH 1, 1-dimethyl hydrazine)

Group D Atmospheres

acetone
acrylonitrile
ammonia[3]
benzene
butane
1-butanol (butyl alcohol)
2-butanol (secondary butyl alcohol)
n-butyl acetate
isobutyl acetate
ethane
ethanol (ethyl alcohol)
ethyl acetate
ethylene dichloride
gasoline
heptanes
hexanes
methane (natural gas)
methanol (methyl alcohol)
3-methyl-1-butanol (isoamyl alcohol)
methyl ethyl ketone
methyl isobutyl ketone
2-methyl-1-propanol (isobutyl alcohol)
2-methyl-2-propanol (tertiary butyl alcohol)
petroleum naphtha[4]
octanes
pentanes
1-pentanol (amyl alcohol)
propane
1-propanol (propyl alcohol)
2-propanol (isopropyl alcohol)
propylene
styrene
toluene
vinyl acetate
vinyl chloride
xylenes

[1] Group D equipment may be used for this atmosphere if such equipment is isolated in accordance with Section 501–5(a) by sealing all conduit ½-inch size or larger

[2] Group C equipment may be used for this atmosphere if such equipment is isolated in accordance with Section 501–5(a) by sealing all conduit ½-inch size or larger

[3] For Classification of areas involving ammonia atmosphere refer to ANSI B9.1 *Safety Code for Mechanical Refrigeration*—1971 and ANSI K61.1 *Storage and Handling of Anhydrous Ammonia* —1971

[4] A saturated hydrocarbon mixture boiling in the range 20–135 C (68–275 F) Also known by the synonyms benzine, ligroin, petroleum ether or naphtha