



HAZARDOUS LOCATIONS

SELECTED FLAMMABLE GASES AND VAPORS OF LIQUIDS CLASSIFIED AS CLASS I, GROUP A, B, C, & D:

Group Classification and Autoignition Temperature (AIT) of Selected Flammable Gases and Vapors of Liquids having Flash Points below 100°F (37.8°C)

Material	Group
Acetaldehyde	C
Acetone	D
Acetonitrile	D
Acetylene	A
Acrolein (inhibited)	B
Acrylonitrile	D
Allyl Alcohol	C
Allyl Chloride	D
Ammonia	D
n-Amyl Acetate	D
sec-Amyl Acetate	D
Benzene	D
1,3-Butadiene	B
Butane	D
1-Butanol	D
2-Butanol	D
n-Butyl Acetate	D
iso-Butyl Acetate	D
sec-Butyl Acetate	D
Butylamine	D
Butylene	D
Butyl Mercaptan	C
n-Butylaldehyde	C
Carbon Monoxide	C
Chlorobenzene	D
Chloroprene	D
Crotonaldehyde	C
Cyclohexane	D
Cyclohexene	D
Cyclopropane	D
1,1-Dichloroethane	D
1,2-Dichloroethylene	D
1,3-Dichloropropene	D
Dicyclopentadiene	C
Diethyl Ether	C
Diethylamine	C
Di-isobutylene	D
Di-isopropylamine	C
Dimethylamine	C
1,4-Dioxane	C
Di-n-propylamine	C
Epichlorohydrin	C
Ethane	D
Ethanol	D
Ethyl Acetate	D
Ethyl Acrylate (inhibited)	D
Ethylamine	D
Ethyl Benzene	D
Ethyl Chloride	D
Ethylene	C
Ethylenediamine	D
Ethylene Dichloride	D
Ethylenimine	C
Ethylene Oxide	B
Ethyl Formate	D
Ethyl Mercaptan	C
n-Ethyl Morpholine	C
Formaldehyde (Gas)	B

Material	Group
Gasoline	D
Heptane	D
Heptene	D
Hexane	D
2-Hexanone	D
Hexenes	D
Hydrogen	B
Hydrogen Cyanide	C
Hydrogen Selenide	C
Hydrogen Sulfide	C
Isoamyl Acetate	D
Isoamyl Alcohol	D
Isobutyl Acrylate	D
Isobutyraldehyde	C
Isoprene	D
Isopropyl Acetate	D
Isopropylamine	D
Isopropyl Ether	D
Isopropyl Glycidyl Ether	C
Liquefied Petroleum Gas	D
Manufactured Gas (more than 30% H ₂)	B
Mesityl Oxide	D
Methane	D
Methanol	D
Methyl Acetate	D
Methylacetylene	C
Methylacetylene-Propadiene (stabilized)	C
Methyl Acrylate	D
Methylamine	D
Methylcyclohexane	D
Methyl Ether	C
Methyl Ethyl Ketone	D
Methyl Formal	C
Methyl Formate	D
Methyl Isobuty Ketone	D
Methyl Isocyanate	D
Methyl Mercaptan	C
Methyl Methacrylate	D
2-Methyl-1-Propanol	D
2-Methyl-2-Propanol	D
Monomethyl Hydrazine	C
Naphtha (Petroleum)	C
Nitroethane	C
Nitromethane	C
Nonane	D
Norene	D
Octane	D
Octene	D
Pentane	D
1-Pentanol	D
2-Pentanone	D
1-Pentene	D
Propane	D
1-Propanol	D
2-Propanol	D
Propionaldehyde	C
n-Propyl Acetate	D
Propylene	D
Propylene Dichloride	D
Propylene Oxide	B
n-Propyl Ether	C
Propyl Nitrate	B
Pyridine	D

Material	Group
Styrene	D
Tetrahydrofuran	C
Toluene	D
Triethylamine	C
Tripropylamine	D
Turpentine	D
Unsymmetrical Dimethyl Hydrazine (UDMH)	C
Valeraldehyde	C
Vinyl Acetate	D
Vinyl Chloride	D
Vinylidene Chloride	D
Xylenes	D

Group Classification and Autoignition Temperature (AIT) of Vapors of Selected Liquids Having Flash Points 100°F (37.8°C) or Greater, but less than 140°F (60°C)

Material	Group
Acetic Acid	D
Acetic Anhydride	D
Acrylic Acid	D
Allyl Glycidyl Ether	B
t-Butyl Acetate	D
n-Butyl Acrylate (inhibited)	D
N-Butyl Glycidyl Ether	B
Cumene	D
Cyclohexanone	D
p-Cymene	D
Decene	D
Diethyl Benzene	D
Di-isobutyl Ketone	D
Dimethyl Formamide	D
Dipentene	D
Ethyl sec-Amyl Ketone	D
Ethyl Butanol	D
Ethyl Butyl Ketone	D
Ethylene Chlorohydrin	D
Ethylene Glycol Monoethyl Ether	C
Ethylene Glycol Monoethyl Ether Acetate	C
Ethylene Glycol Monomethyl Ether	D
2-Ethylhexaldehyde	D
Ethyl Silicate	D
Formic Acid (90%)	D
Fuel Oils	D
sec-Hexyl Acetate	D
Hydrazine	C
Iso-octyl Aldehyde	C
Kerosene	D
Methyl Amyl Alcohol	D
Methyl n-Amyl Ketone	D
o-Methylcyclohexanone	D
alpha-Methyl Styrene	D
Morpholine	C
Naphtha (Coal Tar)	D
1-Nitropropane	C
2-Nitropropane	C
Propionic Acid	D
Tetramethyl Lead	C

Group Classification and Autoignition Temperature (AIT) of Vapors of Selected Liquids Having Flash Points 140°F (60°C) or Greater, but less than 200°F (93.3°C)

Material	Group
Acetone Cyanohydrin	D
Adiponitrile	D
Aniline	D
Benzyl Chloride	D
n-Butyl Formal	C
t-Butyl Toluene	D
n-Butyric Acid	D
Chloroacetaldehyde	C
1-Chloro-1-Nitropropane	C
Cresol	D
Cyclohexanol	D
n-Decaldehyde	C
n-Decanol	D
Diacetone Alcohol	D
o-Dichlorobenzene	D
1,1-Dichloro-1-Nitroethane	C
Diethylaminoethanol	C
Diethylene Glycol Monobutyl Ether	C
Diethylene Glycol Monomethyl Ether	C
N-N-Dimethyl Aniline	C
Dimethyl Sulfate	D
Dipropylene Glycol Methyl Ether	C
Dodecene	D
Ethylene Glycol Monobutyl Ether	C
Ethylene Glycol Monobutyl Ether Acetate	C
2-Ethyl Hexanol	D
2-Ethyl Hexyl Acrylate	D
2-Ethyl-3-Propyl Acrolein	C
Furfural	C
Furfural Alcohol	C
Hexanol	D
Isodecaldehyde	C
Iso-octyl Alcohol	D
Isophorone	D
Methylcyclohexanol	D
2-Methyl-5-Ethyl Pyridine	D
Monoethanolamine	D
Monoisopropanolamine	D
Monomethyl Aniline	C
Nitrobenzene	D
Nonyl Alcohol	D
n-Octyl Alcohol	D
Phenylhydrazine	D
Propiolactone	D
Propionic Anhydride	D
Tetrahydronaphthalene	D
Tridecene	D
Triethylbenzene	D
Undecene	D
Vinyl Tuolene	D



HAZARDOUS LOCATIONS

SELECTED NONCONDUCTIVE DUSTS CLASSIFIED AS CLASS II, GROUP F and G:

Ignition Sensitivity Equal to or Greater than 0.2; Explosion Severity Equal to or Greater than 0.5

AGRICULTURAL DUSTS

Alfalfa Meal
Almond Shell
Apricot Pit
Cellulose
Cherry Pit
Cinnamon
Citrus Peel
Cocoa Bean Shell
Cocoa, natural, 19% fat
Coconut Shell
Corn
Corncob Grit
Corn Dextrine
Cornstarch, commercial
Cornstarch, modified
Cork
Cottonseed Meal
Cube Root, South Amer.
Flax Shive
Garlic, dehydrated
Guar Seed
Gum, Arabic
Gum, Karaya
Gum, Manila (copal)
Gum, Tragacanth
Hemp Hurd
Lycopodium
Malt Barley
Milk, Skimmed
Pea Flour
Peach Pit Shell
Peanut Hull
Peat, Sphagnum
Pecan Nut Shell
Pectin
Potato Starch, Dextrinated
Pyrethrum
Rauwolfia Vomitoria Root
Rice
Rice Bran
Rice Hull
Safflower Meal
Soy Flour
Soy Protein
Sucrose
Sugar, Powdered
Tung, Kernels, Oil-Free
Walnut Shell, Black
Wheat
Wheat Flour
Wheat Gluten, gum
Wheat Starch
Wheat Straw
Woodbark, Ground
Wood Flour
Yeast, Torula

CARBONACEOUS DUSTS

Asphalt, (Blown Petroleum Resin)
Charcoal
Coal, Kentucky Bituminous
Coal, Pittsburgh Experimental
Coal, Wyoming
Gilsonite
Lignite, California
Pitch, Coal Tar
Pitch, Petroleum
Shale, Oil

CHEMICALS

Acetoacetanilide
Acetoacet-p-phenetidine
Adipic Acid
Anthranilic Acid
Aryl-nitrosomethylamide
Azelaic Acid
2,2-Azo-bis-butyronitrile
Benzoic Acid
Benzotriazole
Bisphenol-A
Chloroacetoacetanilide
Diallyl Phthalate
Dicumyl Peroxide 40-60
Dicyclopentadiene Dioxide
Dihydroacetic Acid
Dimethyl Isophthalate
Dimethyl Terephthalate
3,5 - Dinitrobenzoic Acid
Dinitrotoluamide
Diphenyl
Ditertiary Butyl Paracresol
Ethyl Hydroxyethyl Cellulose
Fumaric Acid
Hexamethylene Tetramine
Hydroxyethyl Cellulose
Isotoic Anhydride
Methionine
Nitrosoamine
Para-oxy-benzaldehyde
Paraphenylene Diamine
Paratertiary Butyl Benzoic Acid
Pentaerythritol
Phenylbetanaphthylamine
Phthalic Anhydride
Phthalimide
Salicylanilide
Sorbic Acid
Stearic Acid, Aluminum Salt
Stearic Acid, Zinc Salt
Sulfur
Teraphthalic Acid

DRUGS

2-Acetylamino-5-nitrothiazole
2-Amino-5-nitrothiazole
Aspirin
Gulasonic Acid, Diacetone
Mannitol
Nitropropidone
1-Sorbose
Vitamin B1, mononitrate
Vitamin C (Ascorbic Acid)

DYES, PIGMENTS, INTERMEDIATES

Beta-naphthalene-azo-Dimethylaniline
Green Base Harmon Dye
Red Dye Intermediate
Violet 200 Dye

PESTICIDES

Benzethonium Chloride
Bis(2-Hydroxy-5-chlorophenyl) methane
Crag No. 974
Dieldrin (20%)
2,6-Ditertiary-butyl-paracresol
Dithane
Ferbam
Manganese Vancide
Sevin
a,a Trithiobis (N,N Dimethylthioformamide)

THERMOPLASTIC RESINS & MOLDING COMPOUNDS

Acetal Resins
Acetal, Linear (Polyformaldehyde)
Acrylic Resins
Acrylamide Polymer
Acrylonitrile Polymer
Acrylonitrile - Vinyl Pyridine Copolymer
Acrylonitrile-Vinyl Chloride-Vinylidene Chloride Copolymer (70-20-10)
Methyl Methacrylate Polymer
Methyl Methacrylate - Ethyl Acrylate Copolymer
Methyl Methacrylate-Ethyl Acrylate-Styrene Copolymer
Methyl Methacrylate-Styrene-Butadiene-Acrylonitrile Copolymer
Methacrylic Acid Polymer
Cellulosic Resins
Cellulose Acetate
Cellulose Triacetate
Cellulose Acetate Butyrate
Cellulose Propionate
Ethyl Cellulose
Methyl Cellulose
Carboxymethyl Cellulose
Hydroxyethyl Cellulose
Chlorinated Polyether Resins
Chlorinated Polyether Alcohol
Nylon (Polyamide) Resins
Nylon Polymer
(Polyhexa-methylene Adipamide)
Polycarbonate Resins
Polycarbonate
Polyethylene Resins
Polyethylene, High Pressure Process
Polyethylene, Low Pressure Process
Polyethylene Wax
Polymethylene Resins
Carboxypolymethylene
Polypropylene Resins
Polypropylene (No Antioxidant)
Rayon Resins
Rayon (Viscose) Flock

Styrene Resins
Polystyrene Molding Cmpd.
Polystyrene Latex
Styrene-Acrylonitrile (70-30)
Styrene-Butadiene Latex (> 75% Styrene; Alum Coagulated)

Vinyl Resins
Polyvinyl Acetate
Polyvinyl Acetate/Alcohol
Polyvinyl Butyral
Vinyl Chloride - Acrylonitrile Co-polymer
Polyvinyl Chloride - Dioctyl Phtha-late Mixture
Vinyl Toluene - Acrylonitrile Buta-diene Copolymer

THERMOSETTING RESINS & MOLDING COMPOUNDS

Allyl Resins
Allyl Alcohol (Derivative CR-39)
Amino Resins
Urea Formaldehyde Molding Compound
Urea Formaldehyde - Phenol Form-aldehyde Molding Compound (Wood Flour Filler)
Epoxy Resins
Epoxy
Epoxy - Bisphenol A
Phenol Furfural
Phenolic Resins
Phenol Formaldehyde
Phenol Formaldehyde Molding Compound (Wood Flour Filler)
Phenol Formaldehyde, Polyalky-lene - Polyamine Modified
Polyester Resins
Polyethylene Terephthalate
Styrene Modified Polyester - Glass Fiber Mixture
Polyurethane Resins
Polyurethane Foam, No Fire Retardant
Polyurethane Foam, Fire Retardant

SPECIAL RESINS AND MOLDING COMPOUNDS

Alkyl Ketone Dimer Sizing Compound
Cashew Oil, Phenolic, Hard
Chlorinated Phenol
Coumarone-Indene, Hard
Ethylene Oxide Polymer
Ethylene-Maleic Anhydride Copolymer
Lignin, Hydrolyzed, Wood-Type, Fines
Petrit Acrylate Monomer
Petroleum Resin (Blown Asphalt)
Rosin, DK
Rubber, Crude, Hard
Rubber, Synthetic, Hard (33% S)
Shellac
Sodium Resinate
Styrene - Maleic Anhydride Copolymer

CONDUCTIVE DUSTS CLASSIFIED AS CLASS II, GROUP E:

Class II, Division 1, Group E (metal or electrically conductive dusts, including Aluminum alloys, Iron, Manganese, Tin, Titanium and Vanadium) are especially hazardous. Our AIFX model is rated for Group E.