

Hazardous Locations

Class	Division	Group	Atmosphere	Ignition Temps.
1 Gases, vapors	1 Normally hazardous	A	acetylene	581°F
		B	butadiene ¹	788°F
			ethylene oxide ²	804°F
			hydrogen	752°F
			Manufactured gases containing more than 30% hydrogen (by volume) propylene oxide ² .	840°F
		C	acetaldehyde	347°F
			cyclopropane	938°F
			diethyl ether	320°F
			ethylene	842°F
			Unsymmetrical dimethyl hydrazine (UDMH 1, 1-dimethyl hydrazine).	480°F
		D	acetone	869°F
			acrylonitrile	898°F
			ammonia ³	928°F
			benzene	1040°F
			butane	550°F
			1-butanol (butyl alcohol)	650°F
			2-butanol (secondary butyl alcohol)	761°F
			n-butyl acetate	790°F
			ethane	882°F
			ethanol (ethyl alcohol)	685°F
			ethyl acetate	800°F
			ethylene dichloride	775°F
			gasoline (56-60 octane) (100 octane)	536°F 880°F
			heptanes	399°F
			hexanes	437°F
			isoprene	428°F
			methane (natural gas)	999°F
			methanol (methyl alcohol)	725°F
			3-methyl-1-butanol (isoamyl alcohol)	662°F
			methyl ethyl ketone	759°F
			methyl isobutyl ketone	840°F
			2-methyl-1-propanol (isobutyl alcohol)	780°F
			2-methyl-2-propanol (tertiary butyl alcohol)	892°F
			petroleum naphtha ⁴	550°F
			octanes	403°F
			pentanes	470°F
			1-pentanol (amyl alcohol)	572°F
			propane	842°F
			1-propanol (propyl alcohol)	775°F
2-propanol (isopropyl alcohol)	750°F			
propylene	851°F			
styrene	914°F			
toluene	896°F			
vinyl acetate	756°F			
vinyl chloride	882°F			
xylene	867°F to 984°F			

Class	Division	Group	Atmosphere	Ignition Temps.
	2	A	Same as Division 1	
	Not normally hazardous	B	Same as Division 1	
		C	Same as Division 1	
		D	Same as Division 1 (Not normally hazardous means that the gases aren't normally present).	
II Combustible dusts	1 Normally hazardous	E	Atmospheres containing combustible metal dusts regardless of resistivity, or other combustible dusts of similarly hazardous characteristics having resistivity of less than 10 ⁵ ohm-centimeter.	
		G	Atmospheres containing combustible dusts having resistivity of 10 ⁵ ohm-centimeter or greater.	
	2 Not normally hazardous	G	Same as Division 1	

¹Group 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.

²Group 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.

³Classification 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 G-2.1-1972).

⁴A saturated hydrocarbon mixture boiling in the range 20–135°C (69–275°F). Also known by the synonyms benzine, ligroin, petroleum ether or naphtha.

⁵For a complete list noting properties of flammable liquids, gases, and solids, see classification of Gases, Vapors and Dusts for Electrical Equipment in Hazardous (Classified) Locations, NFPA497M-1983.