

Gas and vapour classification according to CENELEC

CENELEC EN 50 014 and IEC 60 079-12 standards

SUBDIVISION A		
Hydrocarbons <i>Alkanes :</i> Butane Cyclobutane Cycloheptane Cyclohexane Cyclopentane Decahydronaphtalene (decaline) Decane Ethane Ethylcyclobutane Ethylcyclohexane Ethylcyclopentane Heptane Hexane Methane Methylcyclobutane Methylcyclohexane Methylcyclopentane Nonane Octane Pentane Propane <i>Alkenes :</i> Propene (propylene) <i>Aromatic hydrocarbons :</i> Methylstyrene Styrene <i>Benzenic hydrocarbons :</i> Benzene Cumene Cymene Ethylbenzene Naphtalene Toluene Trimethylbenzene Xylene <i>Mixtures of Hydrocarbons :</i> Benzol for cars Gas-oil Kérosene Fuel oil Industrial methane ⁽¹⁾ Oil naphta Petroleum naphta Petroleum (included petroleum spirits) Dry cleaning solvents Turpentine	Compounds containing oxygen <i>Acids :</i> Acetic acid <i>Alcohols et phenols :</i> Butanol Cresol Cyclohexanol Diacetone-alcohol Ethanol Heptanol Hexanol Methanol Methylcyclohexanol Monanol Octanol Pentanol Phenol Propanol <i>Aldehydes :</i> Acetic Aldehyde Metaldehyde <i>Ketones :</i> Acetone Amyl-methyl-ketone Butyl-methyl-ketone Cyclohexanone Ethyl-methyl-ketone 2,4 - Pentanedione (acetylacetone) Propyl-methyl-ketone <i>Esters :</i> Methyl acetate Ethyl acetate Propyl actate Butyl acetate Amyl acetate Vinyl acetate Ethyl Acetylacetate Methyl formate Ethyl formate Methyl methacrylate Ethyl methacrylate <i>Oxides :</i> <i>(included ethers) :</i> Dipropyl ether Carbon monoxide ⁽²⁾	Compounds containing halogens <i>Compounds with no oxygen :</i> Bromoethane Bromobutane Chlorobenzene Chlorobutane Chloroethane Chlorethylene (Vinyl chloride) Chloromethane Chloropropane Allyl chloride Benzyl chloride Methylene chloride Dichlorobenzene Dichloroethane Dichloroethylene Dichloropropane Benzyl trifluoride <i>Compounds containing oxygen :</i> Chloroethanol Acetyl chloride Compounds containing sulphurs : Ethyl mercaptan Propyl-mercaptan Tetrahydrothiophene Thiophene Compounds containing sulphurs : Ammonia Acetonitrile Nitroethane Nitromethane <i>Amines :</i> Amphetamine Aniline Butylamine Cyclohexylamine Diaminoethane Diethylamine Diethylaminoethanol Dimethylamine Dimethylaniline Methylamine Mono-ethanolamine Propylamine Pyridine Toluidine Triethylamine Trimethylamine

These gases or vapours are classified in three subdivisions : A, B and C, depending on their experimental safety gap (IEMS) and their minimum inflammation current (CMI).

SUBDIVISION B
Hydrocarbons Allylene (Propyn) Butadiene Cyclopropane Ethylene Compounds containing nitrogen Hydrocyanidric acid Acrylonitrile Isopropyl nitrate Compounds containing oxygen Acrolein Ethyl acrylate Methyl acrylate Tetrahydrofurfuryl alcohol Crotonaldehyde Dioxalan Dioxan Epoxy-propane Butyl ether of hydroxyacetic acid Butyl ether Ethylic ether Ethyl méthyl ether Méthylic ether Furane Ethylene oxide (epoxyethane) Tétrahydrofuran Trioxane Mixtures Gas from a coke furnace Compounds containing haogens Propane, 1 chloro, 2,3 epoxy (épichlorhydrin) Tétrfluoroethylene

SUBDIVISION C
Acetylene Carbon disulphide Hydrogen Ethyl nitrate

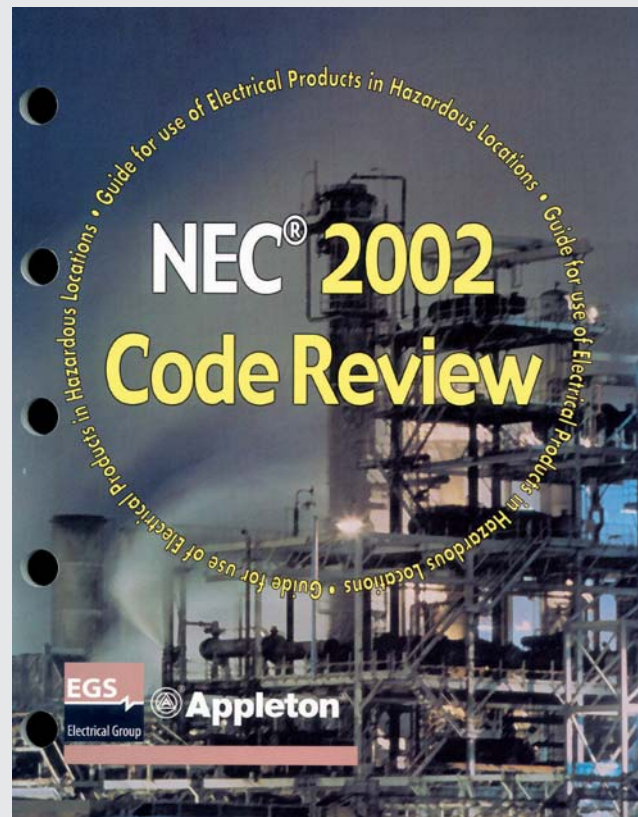
Gas and vapour classification according to NEC

US standard NEC 500

CLASS I - According to NEC 500	
	Group A
Acetylene	
	Group B
Butadiene	
Hydrogen	
Ethylene oxyde	
Propylene oxyde	
	Group C
Acetaldehyde	
Cyclopropane	
Diethyl ether	
Ethylene	
Dimethyl hydrazine	
	Group D
Acetane ethyl	
Butyl acetate	
Vinyl acetate	
Isobutyl acetate	
Acetone	
Acrylonitrile	
Amyl alcohol	
Butylalcohol	
Tertiary butyl alcohol	
Butyl-2 alcohol	
Ethyl alcohol	
Isoamyl alcohol	
Isobutyl alcohol	
Isopropyl alcohol	
Propyl alcohol	
Benzene	
Butane	
Ethylene Chloride	
Vinyl chloride	
Petrol	
Ethane	
Ammonia gas	
Heptane	
Hexane	
Isoprene	
Methane	
Methanol	
Methylisobutyl ketone	
Petroleum naphtha	
Octane	
Pentane	
Propane	
Propylene	
Styrene	
Toluene	
Xylene	

CLASS II
Groupe EFG
Combustible dusts
CLASS II
Fibers and flyings

"NEC 202 Code Review" by Appleton



Part of EGS Group like ATX, Appleton issued a very detailed technical guide about standards in the United States and their applications.

This Guide, considered as a reference worldwide, is available on request.