



Air Liquide



Impuretés mesurées dans le dioxyde de carbone

Molécule	Designation	Dimension	CEMIAG Method
Carbon dioxide	CO ₂	% v/v	IR
Moisture	H ₂ O	ppm v/v	Electrolytic cell
Oxygen + Argon	O ₂ + Ar	ppm v/v	GC DID
Hydrogen	H ₂	ppm v/v	
Nitrogen	N ₂	ppm v/v	
Carbon monoxide	CO	ppm v/v	
Methane	CH ₄	ppm v/v	
Total hydrocarbons (as methane)	THC	ppm v/v	FID
Total non methane hydrocarbons	TNMHC	ppm v/v	Algebraic calculation
Nitrogen oxides	NO _x	ppm v/v	
Nitrogen monoxide	NO	ppm v/v	Chemiluminescence
Nitrogen dioxide	NO ₂	ppm v/v	
Oxygen	O ₂	ppm v/v	Electrochemistry
Non volatile residues	NVR	ppm v/v	Gravimetry
Non volatile organic residues	NVOR	ppm v/v	FTIR
Benzene	C ₆ H ₆	ppm v/v	GC FID
Toluene	C ₇ H ₈	ppm v/v	
Ethyl benzene	C ₈ H ₁₀	ppm v/v	
o,m,p-Xylène	C ₈ H ₁₀	ppm v/v	
Total sulfur	TS	ppm v/v	UV fluorescence
Sulfur dioxide	SO ₂	ppm v/v	

Molecule	Designation	Dimension	CEMIAG Method
Acetylene	C ₂ H ₂	ppm v/v	GC FID
Ethylene	C ₂ H ₄	ppm v/v	
Ethane	C ₂ H ₆	ppm v/v	
Propene	C ₃ H ₆	ppm v/v	
Propane	C ₃ H ₈	ppm v/v	
1,3-Butadiene	C ₄ H ₆	ppm v/v	
1-Butene	C ₄ H ₈	ppm v/v	
i,n-Butane	C ₄ H ₁₀	ppm v/v	
i,n-Pentane	C ₅ H ₁₂	ppm v/v	
1-Pentene	C ₅ H ₁₀	ppm v/v	
1,3 & 1,4-Pentadiene	C ₅ H ₈	ppm v/v	
n-Hexane	C ₆ H ₁₄	ppm v/v	
1-Hexene	C ₆ H ₁₂	ppm v/v	
Cyclo propane	C ₃ H ₆	ppm v/v	
Cyclo pentane	C ₅ H ₁₀	ppm v/v	
Methyl cyclo pentane	C ₆ H ₁₂	ppm v/v	
Cyclo pentene	C ₅ H ₈	ppm v/v	
Cyclo hexene	C ₆ H ₁₀	ppm v/v	
Cyclo hexane	C ₆ H ₁₂	ppm v/v	
Methyl cyclo hexane	C ₇ H ₁₄	ppm v/v	
Methanol	CH ₃ OH	ppm v/v	
Ethanol	C ₂ H ₅ OH	ppm v/v	
Propanol	C ₃ H ₇ OH	ppm v/v	
Butanol	C ₄ H ₉ OH	ppm v/v	
Acetaldehyde	C ₂ H ₄ O	ppm v/v	
Dimethyl ether	C ₂ H ₆ O	ppm v/v	
Diethyl ether	C ₄ H ₁₀ O	ppm v/v	
Ethylene oxide	C ₂ H ₄ O	ppm v/v	
Ethyl acetate	C ₄ H ₈ O	ppm v/v	
Ethyl formate	C ₃ H ₆ O ₂	ppm v/v	
Acetone	C ₃ H ₆ O	ppm v/v	
Isopropanol	C ₃ H ₈ O	ppm v/v	

Molecule	Designation	Dimension	CEMIAG Method
Monoethanolamine	MEA	ppm v/v	Detector tube
Phosphine	PH ₃	ppm v/v	
Vinyl chloride	CH ₂ CHCl	ppm v/v	
Hydrogen cyanide	HCN	ppm v/v	
Carbonyl sulfide	COS	ppm v/v	
Dimethyl sulfide	C ₂ H ₆ S	ppm v/v	
Carbon disulfide	CS ₂	ppm v/v	
Hydrogen sulfide	H ₂ S	ppm v/v	
Methyl mercaptan	CH ₃ SH	ppm v/v	
Ammonia	NH ₃	ppm v/v	
Formaldehyde	CH ₂ O	ppm v/v	
Diethyl amine	C ₄ H ₁₁ N	ppm v/v	
Trimethyl amine	C ₃ H ₉ N	ppm v/v	
Isopropyl amine	C ₃ H ₉ N	ppm v/v	
Methyl amine	CH ₅ N	ppm v/v	
Dimethyl amine	C ₂ H ₇ N	ppm v/v	
Ethyl amine	C ₂ H ₇ N	ppm v/v	

Impuretés en cours de validation

Molecule	Designation
2-Butanol	C ₄ H ₁₀ O
Styrene	C ₈ H ₈
Phenol	C ₆ H ₆ O
Chloroform	CHCl ₃
Bromodichloromethane	CHBrCl ₂
Dibromochloromethane	CHBr ₂ Cl
Bromoform	CHBr ₃
Trichloroethylene	C ₂ HCl ₃
Perchloroethylene	C ₂ Cl ₄

Molecule	Designation
1,2-dichloroethane	C ₂ H ₄ Cl ₂
1, 1, 1-trichloroethane	C ₂ H ₃ Cl ₃
1, 1, 2-Trichloro-1, 2, 2-trifluoroethane	C ₂ F ₃ Cl ₃
Hydrogen sulfide	H ₂ S
Carbonyl sulfide	COS
Carbon disulfide	CS ₂
Dimethyl sulfide	C ₂ H ₆ S
Methyl mercaptan	CH ₃ SH



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