



PRODUCT CODE: 361091

Methanol for UV, IR, HPLC, ACS

CH₄O

CH₃OH

M.= 32,04

CAS [67-56-1]

EINECS 200-659-6

TARIC 2905 11 00 10

SYNONYMS: Carbinol, Methyl Alcohol

PHYSICAL DATA: liquid, Clear, Colourless, Miscible with water, alcohol, ether and methylene chloride • Hygroscopic • D 20/4 0,7915 • M.P.: -97,8 °C • B.P.: 64 - 65 °C • n₂₀/D : 1,3292 • Flash P.:12 °C • Ign. T.:455 °C • Vap. press. (20 °C) 128 hPa • Viscosity 20 °C 0,52 mPa.s • D. M. 20 °C 1,7 Debye • Dielec. constant 25 °C 32,6 • Evap. number (DIN 53170) 6,3 • Heat evap. 65 °C 1100 KJ/Kg • Satur. conc. 20 °C 166 g/m³ • Expl. limit 5,5 % (V) 44 % (V) •

BIBLIOGRAPHY: Merck Index **13**, 5.984 Sax **MDS250** • Safety **2**, **2281 C** • Kühn-Birett **M 10** • Ullmann **(5.)5**, 212 • Beilstein **1**, **273 I**, **131 II**, **252 III**, **1147 IV**, **1127** • BRN 1098229 • ACS **XI** • ISO 6353/2-1983R - 18, 25 • BP. **2018** • USP -**NF 36** • Ph. Eur. 5.2, 3234 **9.0** (2017) 5.2, 3234 • F.C.C **10 11** • Directive 88/344/E.C.E.92/115/E.C.E.94/52/EC97/60/EC (27/10/1997) 2009/32/CE • Royal Decree 472/1990 (6/4/1990), 2667/1998 (11 /12/1998), 1101/2011 (22/7/2011) •

HAZARDOUS: C.E: 603-001-00-X • RTECS: PC 1400000 • LD50 oral rat 1.187 - 2.769 mg/kg • LC50 rat 128,2 mg/l / 4h • LD50 skn rbt 17.100 mg/kg • VLA-ED 200 ppm 266 mg/m³



H: H225 • H331 • H311 • H301 • H370 •

P: P280 • P210 • P233 • P309 • P310 • P302+P352 • P501 •

TRANSPORT REGULATIONS: UN: 1230 • ADR: 3(6.1)/II • IMDG: 3(6.1)/II • IATA: 3(6.1)/II • PAX: 352 • CAO: 364 • (D/E) •

WEIGHT/VOLUME INFORMATION: 1l~0,792 kg 1kg~1,263 l

SPECIFICATIONS:

Minimum assay (G.C.)	99,9%
Density at 20/4	0,791-0,792
Maximum limit of impurities	
APHA colour	10
Acidity	0,0002 meq/g
Alkalinity	0,0002 meq/g
Insoluble matter in H ₂ O	passes test
Non-volatile matter	0,0005 %
Reducing substance to KMnO ₄	passes test
Darkened substances by H ₂ SO ₄	passes test
Carbonyl compounds (as acetone, as formaldehyde and as acetaldehyde)	0,001%
Suitability for gradient according to ACS	passes test
Base line drift (235 nm)	15 mUA
Water (H ₂ O)	0,03 %
Suitability for IR spectrometry:	passes test
Gradient at 235 nm	2 mUA
Gradient at 254 nm	1 mUA
Fluorescence at 254 nm (as quinine)	1 ppb
Fluorescence at 365 nm (as quinine)	1 ppb
UV Spectrum (1cm cell; Ref.: water):	
Transmittance at 205 (Cut off) nm	³ 10 %
Transmittance at 210 nm	³ 30 %
Transmittance at 220 nm	³ 55 %
Transmittance at 230 nm	³ 75 %
Transmittance at 240 nm	³ 90 %
Transmittance at 260-400 nm	³ 98 %
Data of interest in HPLC:	
Rohrschneider Polarity	5,1
Eluotropic value E° (Al ₂ O ₃)	0,95
Sol. H ₂ O in solv. at 20°C	miscible

For critical jobs, purge with nitrogen.

Microfiltered product (0.2 µm) and bottled under nitrogen atmosphere.