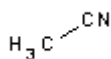


**PRODUCT CODE: 721881****Acetonitrile for UHPLC Hypergradient** C_2H_3N CH_3CN 

M.= 41,05

CAS [75-05-8]

EINECS 200-835-2

TARIC 2926 90 70 90

SYNONYMS: Cyanomethane, Ethanenitrile, Methyl Cyanide

PHYSICAL DATA: liquid, Clear, Colourless, Miscible with water • Hygroscopic • D 20/4 0,786 • M.P.: -48 °C • B.P.: 80 - 82 °C • n₂₀/D : 1,344 • Flash P.:12,8 °C(closed cup) • Ign. T.:524 °C • Vap. press. (20 °C) 98,64 hPa (25 °C) 121,44 hPa • Viscosity 20 °C 0,35 mPa.s • D. M. 20 °C 3,44 Debye • Dielec. constant 20 °C 38,8 • Heat evap. 82 °C 833 KJ/Kg • Satur. conc. 20 °C 163 g/m³ • Expl. limit 3 % (V) 16 % (V) •

BIBLIOGRAPHY: Merck Index **13**, 71 Sax **ABE500** • Safety **2**, **22 A** • Kühn-Birett **A 5** • Beilstein **2**, **183 I**, **184 II**, **181 III**, **408 IV**, **419** • BRN 741857 • Fieser **213** • ACS **XI** •

HAZARDOUS: C.E: 608-001-00-3 • RTECS: AL 7700000 • LD50 oral mus 617 mg/kg / (OECD 401) • LC50 mus 6,022 mg/l / 4h, (OECD 403) • LD50 skn rbt >2.000 mg/kg / (OECD 402) • ECLTV 40 ppm 70 mg/m³ VLA-ED 40 ppm 68 mg/m³ Factor for short-term value (Germany) 2

Derived No Effect Level (DNEL)

Workers Inhalation, acute (systemic) 68 mg/m³ Workers Inhalation, acute (local) 68 mg/m³ Workers Dermal, long exposure (systemic) 32.2mg/kg Workers Inhalation, long term (systemic) 68 mg/m³ Workers Inhalation, long term (local) 68 mg/m³ Population Inhalation, acute (systemic) 220 mg/m³ Population, oral, acute (systemic) 0.6mg/kg Population Inhalation, acute (local) 22 mg/m³ Population Inhalation, long term (systemic) 4,8 mg/m³ Population Inhalation, long term (local) 4,8 mg/m³

Predicted No Effect Concentration (PNEC)

Freshwater 10mg/l Marine water 1mg/l Periodic release 10mg/l Freshwater Sediment 7.53mg/kg Soil 2.41mg/kg Sewage treatment plant 32mg/l



H: H225 • H332 • H312 • H302 • H319 •

P: P210 • P233 • P240 • P241 • P242 • P243 • P261 • P270 • P271 • P280 • P301+P330+P331 •

P303+P361+P353 • P304+P340 • P305+P351+P338 • P337+P313 • P312 • P322 • P363 • P370+P378 • P501 •

TRANSPORT REGULATIONS: UN: 1648 • ADR: 3/II • IMDG: 3/II • IATA: 3/II • PAX: 353 • CAO: 364 • (D/E) •

WEIGHT/VOLUME INFORMATION: 1l~0,781 kg 1kg~1,28 l

SPECIFICATIONS:

Minimum assay (G.C.)	99,9%
Identity :	
Identity	IR passes test
Density at 20/4	0,779-0,783
Suitability: for fluorescence detection (NIST SRM 1647B)	passes test
for PAH analysis (HPLC fluorescence detection)	passes test
for pesticide analysis (HPLC UV detection)	passes test

Maximum limit of impurities

APHA colour	10
Acidity	0,0001 meq/g
Alkalinity	0,0001 meq/g
Non-volatile matter	0,0001 %
Base line drift (210 nm)	10 mUA
Water (H2O)	0,01 %
Gradient at 210 nm	1 mUA
Gradient at 254 nm	0,5 mUA
UV Spectrum (1cm cell; Ref.: water):	
Transmittance at 190 nm	³ 30 %
Transmittance at 193 nm	³ 60 %
Transmittance at 195 nm	³ 85 %
Transmittance at 200 nm	³ 96 %
Transmittance at 215 nm	³ 98 %
Transmittance at 230-400 nm	³ 99 %

Data of interest in HPLC:	
UV-Cut off	190 nm
Rohrschneider Polarity	5,8
Eluotropic value E° (Al2O3)	0,65
Sol. H2O in solv. at 20°C	miscible

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