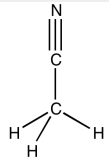
AC0371
Acetonitrile, LC-MS

Identification

CH_3CN
M = 41,05 g/mol
CAS [75-05-8]
EC number: 200-835-2
Taric code: 2926 90 95



Synonyms

Methyl cyanide, Cyanomethane

Applications

chromatography, synthesis of organic products, solvents.

Specifications

assay (G.C.)	min. 99,9 %	residue on evaporation	max. 0,0001 %
identity (IR-spectrum)	passes test	water (K.F.)	max. 0,01 %
density (20º/4º)	0,779 - 0,783	suitability for use in LC-MS	passes test
acidity	max. 0,0002 meq/g		
aluminium (Al)	max. 0,5 ppm	min. transmission/max. absorbance	
barium (Ba)	max. 0,1 ppm	in a 1,0 cm cell at	
cadmium (Cd)	max. 0,05 ppm	wavelength:	T(%) A (AU)
calcium (Ca)	max. 0,1 ppm	195 nm	80 % 0,097 AU
chromium (Cr)	max. 0,02 ppm	200 nm	95 % 0,022 AU
cobalt (Co)	max. 0,02 ppm	210 nm	97 % 0,013 AU
copper (Cu)	max. 0,02 ppm	220 nm	98 % 0,009 AU
iron (Fe)	max. 0,1 ppm	230 nm	99 % 0,004 AU
lead (Pb)	max. 0,1 ppm		
magnesium (Mg)	max. 0,1 ppm	gradient grade (210 nm)	
manganese (Mn)	max. 0,02 ppm	maximum background absorbance:	0,012 AU
nickel (Ni)	max. 0,02 ppm	maximum peak absorbance:	0,001 AU
potassium (K)	max. 0,1 ppm	gradient grade (254 nm)	
silver (Ag)	max. 0,1 ppm	maximum peak absorbance:	0,0005 AU
sodium (Na)	max. 0,1 ppm		
tin (Sn)	max. 0,1 ppm	Microfiltered through membranes	
zinc (Zn)	max. 0,1 ppm	of pore diameter 0,22 µm	

Physical data

- Density: 0,786 g/cm3
- Solub. in water: (20 ºC): miscible
- Melting point: -45,7 ºC
- Boiling point: 81,6 ºC
- Flash point: 2 ºC
- Ignition temperature: 524 ºC
- Vapour pressure: (20 ºC) 97 hPa
- Refraction index: (n 20 ºC) 1,3442
- Viscosity: (20 ºC) 0,39 mPas
- Dipolar moment: (20 ºC) 3,44 Debye
- Dielectric const.: (20 ºC) 37,5
- Evap. heat: (81 ºC) 833 KJ/kg
- Saturation conc.: (20 ºC) 163 g/m^3
- Expl. limit (upper): 17 Vol%
- Expl. limit (lower): 3,0 Vol%

Safety - GHS

Signal Word: Danger

Hazard Statements:

H225: Highly flammable liquid and vapour.
H302: Harmful if swallowed.
H312: Harmful in contact with skin.
H332: Harmful if inhaled.
H319: Causes serious eye irritation.

Precautionary Statements:

P210: Keep away from heat / sparks / open flames / hot surfaces. - No smoking.
P241: Use explosion-proof electrical / ventilating / lighting / equipment.
P261: Avoid breathing dust / fume / gas / mist / vapours / spray.
P303+P361+P353: IF ON SKIN (or hair): Remove / Take off immediately all contaminated clothing. Rinse skin with water / shower.
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P501a: Dispose of contents / container in accordance with local / regional / national / international regulations.

Toxicological data

- LD 50 (oral, rat): 2730 - 3800 mg/kg
- MAK: 20 ml/m^3 , 34 mg/m^3
- WGK: 2
- Poison class CH (Swiss): 2

Transport/storage

- ADR: 3 F1 II • UN 1648 • ACETONITRILE
- IMDG: 3 II • UN 1648 • ACETONITRILE
- IATA/ICAO: 3 II • UN 1648 • ACETONITRILE
- PAX: 305
- CAO: 307
- Store between 15ºC and 25ºC