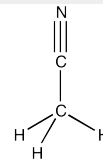


Identification

CH₃CN
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 %
litmus paper test.....passes test
identity (IR-spectrum).....passes test
density (20°/20°).....0,781 - 0,785
refractive index n_{20/D}.....1,343 - 1,345
distillation range (80-82°C).....min. 95 %
appearance.....clear
colour (Hazen).....max. 10
acidity.....max. 0,0002 meq/g
alkalinity.....max. 0,0001 meq/g
cyanides (CN).....max. 50 ppm
aluminium (Al).....max. 0,1 ppm
barium (Ba).....max. 0,01 ppm
boron (B).....max. 0,02 ppm
cadmium (Cd).....max. 0,01 ppm
calcium (Ca).....max. 0,3 ppm
chromium (Cr).....max. 0,02 ppm
cobalt (Co).....max. 0,02 ppm
copper (Cu).....max. 0,02 ppm
iron (Fe).....max. 0,02 ppm
lead (Pb).....max. 0,1 ppm
magnesium (Mg).....max. 0,1 ppm
manganese (Mn).....max. 0,01 ppm

nickel (Ni).....max. 0,02 ppm
tin (Sn).....max. 0,1 ppm
zinc (Zn).....max. 0,01 ppm
residue on evaporation.....max. 0,0002 %
water (K.F.).....max. 0,03 %

liquid chromatography suitability

absorbance.....passes test
gradient elution.....passes test

UV Spectroscopy in a 1,0 cm cell:

min. transmission at
195 nm.....min. 70
200 nm.....min. 90
230 nm.....min. 98
240-420 nm.....min. 97,7
max. absorbance at
195 nm.....max. 0,155
200 nm.....max. 0,046
230 nm.....max. 0,009
240-420 nm.....max. 0,010

Microfiltered through membranes of pore diameter 0,22 µm

Physical data

- Density: 0,786 g/cm³
- Solub. in water: (20 °C): miscible
- Melting point: -45,7 °C
- Boiling point: 81,6 °C
- Flash point: 2 °C
- Ignition temperature: 524 °C
- Vapour pressure: (20 °C) 97 hPa
- Refraction index: (n 20 °C) 1,3442
- Viscosity: (20 °C) 0,39 mPas
- Dipolar moment: (20 °C) 3,44 Debye
- Dielectric const.: (20 °C) 37,5
- Evap. heat: (81 °C) 833 KJ/kg
- Saturation conc.: (20 °C) 163 g/m³
- 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+H312+H332: Harmful if swallowed, in contact with skin or if inhaled.
H319: Causes serious eye irritation.



Precautionary Statements:

P210: Keep away from heat / sparks / open flames / hot surfaces. - No smoking.
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.
P370+P378: In case of fire: Use ... for extinction.
P403+P235: Store in a well-ventilated place. Keep cool.
P501a: Dispose of contents / container in accordance with local / regional / national / international regulations.

Transport/storage

- ADR: 3 F1 II • UN 1648 • ACETONITRILE
- IMDG: 3 II • UN 1648 • ACETONITRILE
- IATA/ICAO: 3 II • UN 1648 • ACETONITRILE
- PAX: 353
- CAO: 364
- 10°C - 30°C