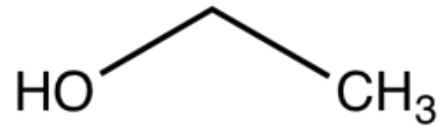


Identification

C_2H_5OH
 M = 46,07 g/mol
 CAS [64-17-5]
 EC number: 200-578-6
 Taric code: 2207 10 00


Synonyms

Ethyl alcohol, Methylcarbinol, Spirit, Spirit of wine

Applications

solvents, disinfectant, for pharmaceuticals synthesizing, synthesis of organic products, perfumery.

Specifications

assay (G.C.) (v/v)..... min. 99,9 %
 identity (IR-spectrum)..... passes test
 density (20°/4°)..... 0,789 - 0,791
 appearance..... clear
 colour (Hazen)..... max. 10
 solubility in water..... passes test
 acidity..... max. 0,0002 meq/g
 alkalinity..... max. 0,0002 meq/g
 chlorides (Cl)..... max. 0,00003 %
 nitrates (NO₃)..... max. 0,00003 %
 phosphates (as PO₄)..... max. 0,00003 %
 sulfates (SO₄)..... max. 0,00003 %
 acetone (G.C.)..... max. 0,001 %
 benzene (G.C.)..... max. 0,0002 %
 isoamyl alcohol (G.C.)..... max. 0,05 %
 methanol (G.C.)..... max. 0,01 %
 methylethylketone (G.C.)..... max. 0,02 %

2-propanol (G.C.)..... max. 0,003 %
 carbonyl compounds (as CO)..... max. 0,03 %
 higher alcohols (G.C.)..... max. 0,01 %
 substances reducing KMnO₄ passes test
 substances darkened by H₂SO₄..... passes test
 residue on evaporation..... max. 0,0004 %
 water (v/v) (K.F.)..... max. 0,1 %

liquid chromatography suitability absorbance..... passes test

min. transmission/max. absorbance in a 1,0 cm cell at
 wavelength:..... T(%) A (AU)
 220 nm..... 55 % 0,260 AU
 230 nm..... 72 % 0,143 AU
 245 nm..... 90 % 0,046 AU
 270 nm..... 98 % 0,009 AU

Microfiltered through membranes of pore diameter 0,22 µm

Physical data

- Density: 0,79 g/cm³
- Solub. in water: (20 °C): miscible
- Melting point: -114,5 °C
- Boiling point: 78,3 °C
- Flash point: 13 °C
- Ignition temperature: 425 °C
- Vapour pressure: (20 °C) 59 hPa
- Viscosity: (20 °C) 1,2 mPas
- Dipolar moment: (20 °C) 1,7 Debye
- Dielectric const.: (25 °C) 24,3
- Evap. heat: (78 °C) 855 KJ/kg
- Saturation conc.: (20 °C) 105 g/m³
- Expl. limit (upper): 15 Vol%
- Expl. limit (lower): 3,5 Vol%
- pH(10 g/l H₂O, 20 °C) 7,0

Safety - GHS

Signal Word: Danger

Hazard Statements:

H225: Highly flammable liquid and vapour.
 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 1170 • ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)
- IMDG: 3 II • UN 1170 • ETHYL ALCOHOL
- IATA/ICAO: 3 II • UN 1170 • ETHYL ALCOHOL
- PAX: 353
- CAO: 364
- 10°C - 30°C