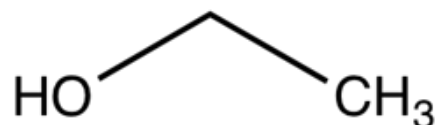


Identification

C₂H₅OH
 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).....	95,1- 96,9 %	lithium (Li).....	max. 0,02 ppm
identity (IR-spectrum).....	passes test	magnesium (Mg).....	max. 0,1 ppm
density (20°/4°).....	0,804 - 0,807	manganese (Mn).....	max. 0,02 ppm
appearance.....	clear	molybdenum (Mo).....	max. 0,02 ppm
colour (Hazen).....	max. 10	nickel (Ni).....	max. 0,02 ppm
solubility in water.....	passes test	platinum (Pt).....	max. 0,02 ppm
acidity.....	max. 0,0002 meq/g	silver (Ag).....	max. 0,02 ppm
alkalinity.....	max. 0,0002 meq/g	thallium (Tl).....	max. 0,02 ppm
chlorides (Cl).....	max. 0,00003 %	tin (Sn).....	max. 0,1 ppm
nitrates (NO ₃).....	max. 0,00003 %	vanadium (V).....	max. 0,02 ppm
phosphates (as PO ₄).....	max. 0,00003 %	zinc (Zn).....	max. 0,1 ppm
sulfates (SO ₄).....	max. 0,00003 %	zirconium (Zr).....	max. 0,02 ppm
aluminium (Al).....	max. 0,5 ppm	formaldehyde.....	max. 0,0005 %
antimony (Sb).....	max. 0,02 ppm	furfural.....	passes test
arsenic (As).....	max. 0,02 ppm	fusel oil.....	passes test
barium (Ba).....	max. 0,1 ppm	acetaldehyde and acetal (G.C.).....	max. 0,001 %
beryllium (Be).....	max. 0,02 ppm	acetone (G.C.).....	max. 0,001 %
bismuth (Bi).....	max. 0,02 ppm	benzene (G.C.).....	max. 0,0002 %
boron (B).....	max. 0,02 ppm	isoamyl alcohol (G.C.).....	max. 0,05 %
cadmium (Cd).....	max. 0,05 ppm	methanol (G.C.).....	max. 0,01 %
calcium (Ca).....	max. 0,5 ppm	methylethylketone (G.C.).....	max. 0,02 %
chromium (Cr).....	max. 0,02 ppm	2-propanol (G.C.).....	max. 0,003 %
cobalt (Co).....	max. 0,02 ppm	aldehydes (as CH ₃ CHO).....	max. 0,001 %
copper (Cu).....	max. 0,02 ppm	carbonyl compounds (as CO).....	max. 0,003 %
gallium (Ga).....	max. 0,02 ppm	higher alcohols (G.C.).....	max. 0,01 %
gold (Au).....	max. 0,02 ppm	substances darkened by H ₂ SO ₄	passes test
indium (In).....	max. 0,02 ppm	substances reducing KMnO ₄	passes test
iron (Fe).....	max. 0,1 ppm	residue on evaporation.....	max. 0,0005 %
lead (Pb).....	max. 0,1 ppm	water (v/v) (K.F.).....	3,1 - 4,9 %

Physical data

- Density: 0,81 g/cm³
- Solub. in water: (20 °C): miscible
- Melting point: -117 °C
- Boiling point: 78 °C
- Flash point: 17 °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
- 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