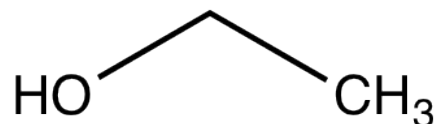


Identification

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).....	min. 99,9 %	lead (Pb).....	max. 0,1 ppm
identity (IR-spectrum).....	passes test	lithium (Li).....	max. 0,02 ppm
density (20°/4°).....	0,789 - 0,791	magnesium (Mg).....	max. 0,1 ppm
density (20°/20°).....	0,790 - 0,793	manganese (Mn).....	max. 0,02 ppm
appearance.....	clear	molybdenum (Mo).....	max. 0,02 ppm
colour (Hazen).....	max. 10	nickel (Ni).....	max. 0,02 ppm
absorbance.....	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
solubility in water.....	passes test	tin (Sn).....	max. 0,1 ppm
acidity or alkalinity.....	passes test	titanium (Ti).....	max. 0,02 ppm
chlorides (Cl).....	max. 0,00003 %	vanadium (V).....	max. 0,02 ppm
nitrites (NO ₂).....	max. 0,00003 %	zinc (Zn).....	max. 0,1 ppm
phosphates (as PO ₄).....	max. 0,00003 %	zirconium (Zr).....	max. 0,02 ppm
sulfates (SO ₄).....	max. 0,00003 %	fusel oil.....	passes test
aluminium (Al).....	max. 0,5 ppm	acetaldehyde and acetal (G.C.).....	max. 0,0010 %
antimony (Sb).....	max. 0,02 ppm	acetone (G.C.).....	max. 0,001 %
arsenic (As).....	max. 0,02 ppm	benzene (G.C.).....	max. 0,0002 %
barium (Ba).....	max. 0,1 ppm	methylethylketone (G.C.).....	max. 0,02 %
beryllium (Be).....	max. 0,02 ppm	isoamyl alcohol (G.C.).....	max. 0,05 %
bismuth (Bi).....	max. 0,02 ppm	methanol (G.C.).....	max. 0,0200 %
cadmium (Cd).....	max. 0,05 ppm	2-propanol (G.C.).....	max. 0,003 %
calcium (Ca).....	max. 0,5 ppm	aldehydes (as CH ₃ CHO).....	max. 0,001 %
chromium (Cr).....	max. 0,02 ppm	higher alcohols (G.C.).....	max. 0,01 %
cobalt (Co).....	max. 0,02 ppm	carbonyl compounds (as CO).....	max. 0,003 %
copper (Cu).....	max. 0,02 ppm	substances darkened by H ₂ SO ₄	passes test
gallium (Ga).....	max. 0,02 ppm	substances reducing KMnO ₄	passes test
gold (Au).....	max. 0,02 ppm	residue on evaporation.....	max. 0,0005 %
indium (In).....	max. 0,02 ppm	water (v/v) (K.F.).....	max. 0,1 %
iron (Fe).....	max. 0,1 ppm	total of other impurities.....	max. 300 ppm
		disregard limit.....	max. 9 ppm

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