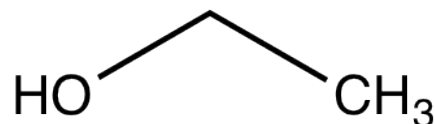


Identification

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 %
identity (IR-spectrum).....	passes test
density (20°/4°).....	0,804 - 0,807
appearance.....	clear
colour (Hazen).....	max. 10
acidity.....	max. 0,0002 meq/g
alkalinity.....	max. 0,0002 meq/g
chlorides (Cl).....	max. 0,00003 %
nitrates (NO ₃).....	max. 0,00003 %
phosphates (as PO ₄).....	max. 0,00003 %
sulfates (SO ₄).....	max. 0,00003 %
aluminium (Al).....	max. 0,1 ppm
antimony (Sb).....	max. 0,02 ppm
arsenic (As).....	max. 0,02 ppm
barium (Ba).....	max. 0,01 ppm
beryllium (Be).....	max. 0,02 ppm
bismuth (Bi).....	max. 0,02 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
gallium (Ga).....	max. 0,02 ppm
gold (Au).....	max. 0,02 ppm
indium (In).....	max. 0,02 ppm
iron (Fe).....	max. 0,02 ppm
lead (Pb).....	max. 0,1 ppm
lithium (Li).....	max. 0,02 ppm
magnesium (Mg).....	max. 0,1 ppm
manganese (Mn).....	max. 0,02 ppm
molybdenum (Mo).....	max. 0,02 ppm
nickel (Ni).....	max. 0,02 ppm
platinum (Pt).....	max. 0,02 ppm
silver (Ag).....	max. 0,02 ppm

thallium (Tl).....	max. 0,02 ppm
tin (Sn).....	max. 0,1 ppm
titanium (Ti).....	max. 0,02 ppm
vanadium (V).....	max. 0,02 ppm
zinc (Zn).....	max. 0,01 ppm
zirconium (Zr).....	max. 0,02 ppm
formaldehyde.....	max. 0,0005 %
furfural.....	passes test
fusel oil.....	passes test
acetaldehyde and acetal (G.C.).....	max. 0,001 %
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. 0,002 %
2-propanol (G.C.).....	max. 0,003 %
aldehydes (as CH ₃ CHO).....	max. 0,001 %
carbonyl compounds (as CO).....	max. 0,003 %
higher alcohols (G.C.).....	max. 0,01 %
substances reducing KMnO ₄	passes test
substances darkened by H ₂ SO ₄	passes test
residue on evaporation.....	max. 0,0002 %
water (v/v) (K.F.).....	3,1- 4,9 %

liquid chromatography suitability absorbance.....

min. transmission/max. absorbance in a 1,0 cm cell at	
wavelength:.....	T(%) A (AU)
210 nm.....	35 % 0,456 AU
220 nm.....	55 % 0,260 AU
230 nm.....	72 % 0,143 AU
250 nm.....	90 % 0,046 AU
270 nm.....	98 % 0,009 AU

Microfiltered through membranes of pore diameter 0,22 µm

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