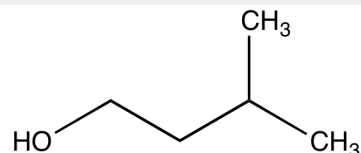


Identification

$C_5H_{12}O$
 M = 88,15 g/mol
 CAS [123-51-3]
 EC number: 204-633-5
 Taric code: 2905 19 00


Synonyms

3-Methyl-1-butanol, Isopentyl alcohol

Applications

analytical chemistry, solvents, synthesis of organic products, for determination of: fats in milk.

Specifications

assay (G.C.).....	min. 98,5 %	magnesium (Mg).....	max. 0,1 ppm
identity (IR-spectrum).....	passes test	manganese (Mn).....	max. 0,02 ppm
density (20°/4°).....	0,808 - 0,809	nickel (Ni).....	max. 0,02 ppm
appearance.....	clear	tin (Sn).....	max. 0,1 ppm
colour (Hazen).....	max. 10	zinc (Zn).....	max. 0,1 ppm
acidity.....	max. 0,002 meq/g	acids, esters (as pentylacetate).....	max. 0,06 %
aluminium (Al).....	max. 0,5 ppm	carbonyl compounds (as CO).....	max. 0,005 %
barium (Ba).....	max. 0,1 ppm	furfural.....	max. 0,0001 %
boron (B).....	max. 0,02 ppm	2,2- dimethyl-1- propanol (G.C.)	max. 0,2 %
cadmium (Cd).....	max. 0,05 ppm	2- methyl-1- butanol (G.C.)	max. 1 %
calcium (Ca).....	max. 0,5 ppm	1-pentanal (G.C.)	max. 0,5 %
chromium (Cr).....	max. 0,02 ppm	1-pentanol (G.C.)	max. 0,5 %
cobalt (Co).....	max. 0,02 ppm	substances darkened by H ₂ SO ₄	passes test
copper (Cu).....	max. 0,02 ppm	residue on evaporation.....	max. 0,002 %
iron (Fe).....	max. 0,1 ppm	water (K.F.).....	max. 0,2 %
lead (Pb).....	max. 0,1 ppm		

Physical data

- Density: 0,81 g/cm³
- Solub. in water: (20 °C): 25 g/l
- Melting point: -117 °C
- Boiling point: 131°C
- Flash point: 43 °C
- Ignition temperature: 340 °C
- Vapour pressure: (20 °C) 3,1 hPa
- Dipolar moment: (20 °C) 1,7 Debye
- Dielectric const.: (20 °C) 14,7
- Evap. heat: (132 °C) 441 KJ/kg
- Saturation conc.: (20 °C) 11 g/m³
- Expl. limit (upper): 8 Vol%
- Expl. limit (lower): 1,2 Vol%
- pH(25 g/l H₂O, 20 °C) ~ 7

Safety - GHS

Signal Word: Warning

Hazard Statements:

- H226: Flammable liquid and vapour.
 H315: Causes skin irritation.
 H318: Causes serious eye damage.
 H332: Harmful if inhaled.
 H335: May cause respiratory irritation.


Precautionary Statements:

- P210: Keep away from heat / sparks / open flames / hot surfaces. - No smoking.
 P241: Use explosion-proof electrical / ventilating / lighting / equipment.
 P280: Wear protective gloves / protective clothing / eye protection / face protection.
 P240: Ground/bond container and receiving equipment.
 P303+P361+P353: IF ON SKIN (or hair): Remove / Take off immediately all contaminated clothing. Rinse skin with water / shower.
 P501a: Dispose of contents / container in accordance with local / regional / national / international regulations.

Toxicological data

- LD 50 (oral, rat): > 5000 mg/kg
- MAK: 100 ml/m³, 370 mg/m³
- WGK: 1
- Poison class CH (Swiss): 4

Transport/storage

- ADR: 3 F1 III • UN 1105 • PENTANOLS
- IMDG: 3 III • UN 1105 • PENTANOLS
- IATA/ICAO: 3 III • UN 1105 • PENTANOLS
- PAX: 309
- CAO: 310