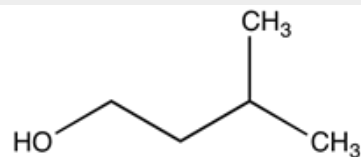


**Identification**

$C_5H_{12}O$   
 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 %	lead (Pb).....	max. 0,1 ppm
identity (IR-spectrum).....	passes test	magnesium (Mg).....	max. 0,1 ppm
density (20°/4°).....	0,808 - 0,809	manganese (Mn).....	max. 0,02 ppm
appearance.....	clear	nickel (Ni).....	max. 0,02 ppm
colour (Hazen).....	max. 10	tin (Sn).....	max. 0,1 ppm
acidity.....	max. 0,002 meq/g	zinc (Zn).....	max. 0,1 ppm
aluminium (Al).....	max. 0,5 ppm	acids, esters (as pentyacetate).....	max. 0,06 %
barium (Ba).....	max. 0,1 ppm	carbonyl compounds (as CO).....	max. 0,005 %
boron (B).....	max. 0,02 ppm	furfural.....	max. 0,0001 %
cadmium (Cd).....	max. 0,05 ppm	2,2- dimethyl-1- propanol (G.C.) .....	max. 0,2 %
calcium (Ca).....	max. 0,5 ppm	2- methyl-1- butanol (G.C.) .....	max. 1 %
chromium (Cr).....	max. 0,02 ppm	1-pentanal (G.C.) .....	max. 0,5 %
cobalt (Co).....	max. 0,02 ppm	1-pentanol (G.C.) .....	max. 0,5 %
copper (Cu).....	max. 0,02 ppm	substances darkened by H <sub>2</sub> SO <sub>4</sub> .....	passes test
iron (Fe).....	max. 0,1 ppm	residue on evaporation.....	max. 0,002 %
		water (K.F.).....	max. 0,2 %

**Physical data**

- Density: 0,81 g/cm<sup>3</sup>
- 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/m<sup>3</sup>
- Expl. limit (upper): 8 Vol%
- Expl. limit (lower): 1,2 Vol%
- pH(25 g/l H<sub>2</sub>O, 20 °C) ~ 7

**Safety - GHS**

**Signal Word:** Danger

**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.  
 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.  
 P310: Immediately call a POISON CENTER or doctor / physician.  
 P370+P378: In case of fire: Use ... for extinction.  
 P405: Store locked up.  
 P501a: Dispose of contents / container in accordance with local / regional / national / international regulations.

**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
- 10°C - 30°C