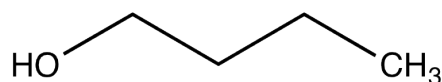


1-Butanol, for analysis, ExpertQ®, ACS, ISO, Reag. Ph Eur

Identification

C₄H₁₀O
M = 74,12 g/mol
CAS [71-36-3]
EC number: 200-751-6
Taric code: 2905 13 00



Synonyms

n-Butyl alcohol, Propylcarbinol

Applications

solvents, synthesis of organic products, microscopy.

Specifications

assay (G.C.).....	min. 99,5 %	iron (Fe).....	max. 0,1 ppm
identity (IR-spectrum).....	passes test	lead (Pb).....	max. 0,1 ppm
density (20°/4°).....	0,809 - 0,810	magnesium (Mg).....	max. 0,1 ppm
density (20°/20°).....	0,810 - 0,812	manganese (Mn).....	max. 0,02 ppm
appearance.....	clear	nickel (Ni).....	max. 0,02 ppm
colour (Hazen).....	max. 10	tin (Sn).....	max. 0,1 ppm
boiling point.....	116 - 119 °C	zinc (Zn).....	max. 0,1 ppm
acidity.....	max. 0,0008 meq/g	aldehydes.....	passes test
aluminium (Al).....	max. 0,5 ppm	carbonyl compounds (as CO).....	max. 0,01 %
barium (Ba).....	max. 0,1 ppm	2-butanol (G.C.).....	max. 0,05 %
boron (B).....	max. 0,02 ppm	butyraldehyde (G.C.).....	max. 0,01 %
cadmium (Cd).....	max. 0,05 ppm	dibutyl ether (G.C.).....	max. 0,1 %
calcium (Ca).....	max. 0,5 ppm	isobutanol (G.C.).....	max. 0,15 %
chromium (Cr).....	max. 0,02 ppm	substances darkened by H ₂ SO ₄	passes test
cobalt (Co).....	max. 0,02 ppm	residue on evaporation.....	max. 0,001 %
copper (Cu).....	max. 0,02 ppm	water (K.F.).....	max. 0,1 %

Physical data

- Density: 0,81 g/cm³
- Solub. in water: (20 °C): 79 g/l
- Melting point: -89,5 °C
- Boiling point: 118 °C
- Flash point: 34 °C
- Ignition temperature: 340 °C
- Vapour pressure: (20 °C) 6,7 hPa
- Refraction index: (n 20 °C/D) 1,3993
- Viscosity: (20 °C) 2,95 mPas
- Dipolar moment: (20 °C) 1,66 Debye
- Dielectric const.: (20 °C) 17,8
- Saturation conc.: (20 °C) 20 g/m³
- Expl. limit (upper): 11,3 Vol%
- Expl. limit (lower): 1,4 Vol%
- pH(70 g/l H₂O, 20 °C) 7

Safety - GHS

Signal Word: Danger

Hazard Statements:

- H318: Causes serious eye damage.
H226: Flammable liquid and vapour.
H302: Harmful if swallowed.
H335: May cause respiratory irritation.
H336: May cause drowsiness or dizziness.
H315: Causes skin 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 1120 • BUTANOLS
- IMDG: 3 III • UN 1120 • BUTANOLS
- IATA/ICAO: 3 III • UN 1120 • BUTANOLS
- PAX: 309
- CAO: 310
- 10°C - 30°C