

AL0170 1-Butanol, extra pure, Pharpur®, NF



assay (G.C.) min. 99,5 %
 identification passes test
 acidity passes test
 n-butyraldehyde (G.C.) max. 0,1 %
 2-butanol (G.C.) max. 0,1 %
 isobutyl alcohol max. 0,1 %
 butyl ether max. 0,2 %
 residue on evaporation max. 0,004 %

water (K.F.) max. 0,1 %
 Elemental impurities are analysed according to guideline CHMP/ICH/353369/2013.
 Residual solvents are analysed according to guideline CPMP/ICH/283/95.

ART. NO.	VOLUME	CONTAINER
AL01701000	1 l	⓪
AL01702500	2,5 l	⓪
AL0170005P	5 l	⓪
AL0170025A	25 l	⓪
AL0170025P	25 l	⓪

AL0173 1-Butanol, ExpertQ®, for analysis, ACS, ISO, Reag. Ph Eur



assay (G.C.) min. 99,5 %
 identity (IR-spectrum) passes test
 density (20°/4°) 0,809 - 0,810
 density (20°/20°) 0,810 - 0,812
 appearance clear
 colour (Hazen) max. 10
 boiling point 116 - 119 °C
 acidity max. 0,0008 meq/g
 aluminium (Al) max. 0,5 ppm
 barium (Ba) max. 0,1 ppm
 boron (B) max. 0,02 ppm
 cadmium (Cd) max. 0,05 ppm
 calcium (Ca) max. 0,5 ppm
 chromium (Cr) max. 0,02 ppm
 cobalt (Co) max. 0,02 ppm
 copper (Cu) max. 0,02 ppm

iron (Fe) max. 0,1 ppm
 lead (Pb) max. 0,1 ppm
 magnesium (Mg) max. 0,1 ppm
 manganese (Mn) max. 0,02 ppm
 nickel (Ni) max. 0,02 ppm
 tin (Sn) max. 0,1 ppm
 zinc (Zn) max. 0,1 ppm
 aldehydes passes test
 carbonyl compounds (as CO) max. 0,01 %
 2-butanol (G.C.) max. 0,05 %
 butyraldehyde (G.C.) max. 0,01 %
 dibutyl ether (G.C.) max. 0,1 %
 isobutanol (G.C.) max. 0,15 %
 substances darkened by H₂SO₄ passes test
 residue on evaporation max. 0,001 %
 water (K.F.) max. 0,1 %

ART. NO.	VOLUME	CONTAINER
AL01731000	1 l	⓪
AL01732500	2,5 l	⓪
AL0173005P	5 l	⓪
AL0173025A	25 l	⓪
AL0173200L	200 l	⓪

AL0175 1-Butanol, HPLC grade



assay (G.C.) min. 99,8 %
 identity (IR-spectrum) passes test
 density (20°/4°) 0,809 - 0,810
 acidity max. 0,0002 meq/g
 alkalinity max. 0,0002 meq/g
 residue on evaporation max. 0,0002 %
 water (K.F.) max. 0,1 %

min. transmission/max. absorbance in a 1,0 cm cell at wavelength
 T(%) A (AU)
 210 nm 20 % 0,699 AU
 220 nm 50 % 0,301 AU
 245 nm 90 % 0,046 AU
 Microfiltered through membranes of pore diameter 0,22 µm

ART. NO.	VOLUME	CONTAINER
AL01751000	1 l	⓪
AL01752500	2,5 l	⓪

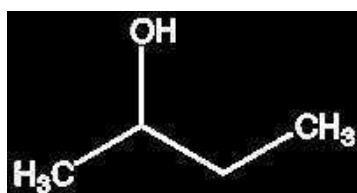
AL0171 1-Butanol, standard substance for GC



assay 99,8%
 over ramp 60°C, 6°C/min 160°C, 20°C/min 220°C
 identity IR

ART. NO.	VOLUME	CONTAINER
AL01710005	5 ml	⓪

2-BUTANOL



- Synonyms: sec-Butyl alcohol, Butyl alcohol secondary, Ethyl methyl carbinol
- C₄H₁₀O
- M = 74,12 g/mol
- CAS [78-92-2]
- EINECS-No.: 201-158-5
- Density: 0,81 g/cm³
- Solub. in water: (20 °C): 240 - 250 g/l
- Melting point: -89 °C
- Boiling point: 98,5 - 100,5 °C
- Flash pt. 24 °C
- Ignition temp.: 390 °C
- Vapour pressure: (20 °C) 16,5 hPa

- Dielectric const.: (20 °C) 15,8
- LD 50 (oral, rat): 6480 mg/kg
- EC-Index-No.: 603-004-01-3 [1]
- ADR: 3 F1 III UN 1120
- IMDG: 3 III UN 1120
- IATA/ICAO: 3 III UN 1120
- GHS-signal word: Warning
- GHS-H sentences: H226 - H319 - H335 - H336
- GHS-P sentences: P210 - P243 - P260 - P280 - P304 + P340 - P305 + P351 + P338 - P308 + P313
- Tariff number: 2905 14 90 00
- Applications: analytical chemistry, synthesis of organic products and perfumery.

AL0176 2-Butanol, EssentQ®



assay (G.C.) min. 99 %
 identity (IR-spectrum) passes test
 density (20°/4°) 0,806 - 0,808
 residue on evaporation max. 0,005 %
 water (K.F.) max. 0,2 %

ART. NO.	VOLUME	CONTAINER
AL01761000	1 l	⓪
AL0176005P	5 l	⓪

ART. NO.	VOLUME	CONTAINER
AL0176025P	25 l	⓪