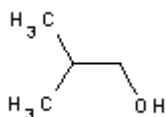
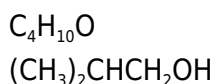


**PRODUCT CODE: 131089****Isobutanol (Reag. Ph. Eur.) for analysis, ACS**

M.= 74,12

CAS [78-83-1]

EINECS 201-148-0

TARIC 2905 14 90 00

FEMA 2179

SYNONYMS: 2-Methyl-1-Propanol, iso-Butanol, Isobutyl Alcohol, iso-Butyl Alcohol

PHYSICAL DATA: liquid, Clear, Colourless, Soluble in water 95 g/l at 20 °C Hygroscopic • D 20/4 0,803 • M.P.: -108 °C • B.P.: 108 °C • n_{20/D} : 1,3955 • Flash P.: 29 °C • Ign. T.: 430 °C • Vap. press. (20 °C) 12 hPa • Viscosity 20 °C 6,68 mPa.s • D. M. 20 °C 1,79 Debye • Dielec. constant 20 °C 17,7 • Heat evap. 108 °C 577 KJ/Kg • Satur. conc. 20 °C 36 g/m³ • Expl. limit 1,7 % (V) 10,7 % (V) •

BIBLIOGRAPHY: Merck Index **12**, 5.146 13, 5.148 Sax **IIL000** • Safety **2**, **2422 A** • Kühn-Birett **B 38** • Beilstein **1**, **373 I**, **189 II**, **405 III**, **1550 IV**, **1588** • BRN 1718763 • ACS **XI** • F.C.C **10 11** •

HAZARDOUS: C.E: 603-108-00-1 • RTECS: NP 9625000 • LD L0 oral rbt 3.750 mg/kg • LD50 oral rat 2.460 mg/kg • LC L0 rat 8000ppm / 4h • LD50 skn rbt 3.400 mg/kg • VLA-ED 50 ppm 154 mg/m³



H: H226 • H335 • H315 • H318 • H336 •

P: P210 • P233 • P240 • P241 • P242 • P243 • P261 • P264 • P271 • P280 • P302+P352 • P303+P361+P353 • P304+P340 • P305+P351+P338 • P310 • P312 • P321 • P332+P313 • P362 • P370+P378 • P403+P233 • P403+P235 • P405 • P501 •

TRANSPORT REGULATIONS: UN: 1212 • ADR: 3/III • IMDG: 3/III • IATA: 3/III • PAX: 355 • CAO: 366 • (D/E) •**WEIGHT/VOLUME INFORMATION:** 1l~0,802 kg 1kg~1,247 l

SPECIFICATIONS:

Minimum assay (G.C.)	99,0%
Identity :	
Identity	IR passes test
Density at 20/4	0,801-0,802
Range of Distillation (>96% dist.)	107-109°C
Refractive Index n ₁₅ /D	1,397-1,399

Maximum limit of impurities

APHA colour	10
Acidity	0,0005 meq/g
Alkalinity	0,0005 meq/g
Insoluble matter in H ₂ O	passes test
Non-volatile matter	0,001 %
Darkened substances by H ₂ SO ₄	passes test
Peroxides (as H ₂ O ₂)	0,001%
Butanal (G.C.)	0,01%
Butanone (G.C.)	0,02%
Isobutanal (G.C.)	0,05%
Water (H ₂ O)	0,1 %

Metals by ICP [in mg/Kg (ppm)]

Ag	0,05
Al	0,5
As	0,05
Au	0,05
B	0,02
Ba	0,1
Be	0,02
Bi	0,05
Ca	0,5
Cd	0,05
Co	0,02
Cr	0,02
Cu	0,02
Fe	0,1
Ga	0,02
Ge	0,05
Hg	0,05
In	0,05
K	0,1
Li	0,05
Mg	0,1
Mn	0,02
Mo	0,02
Na	0,5
Ni	0,02
P	0,2
Pb	0,1
Pt	0,02
S	0,2
Sb	0,02

Si	0,2
Sn	0,5
Sr	0,2
Ti	0,02
Tl	0,02
V	0,02
Zn	0,1
Zr	0,02

Ed.: 3 . Vig.: 15.01.2011 .

Prod.: 131089