

METHYL t-BUTYL ETHER

Product Number 242
Packaged in 4L and 1L Glass Bottles

Specifications:

Packed under nitrogen
Water: Less than 0.02% by Karl Fischer titration
Ultraviolet absorbance:

Wavelength, nm	Maximum Absorbance
210	1.000
225	0.500
250	0.100
300	0.005
400	0.005

Refractive index: 1.3690 ± 0.0010 at 20°C
Residue: Less than one mg/L
Purity: Greater than 99.0% by GC analysis
Peroxide: Less than one mg/L as H₂O₂
Electron Capture GC: No residue peaks greater than 10 ng/L as heptachlor epoxide

Physical Properties:

Molecular weight: 88.14
Boiling point: 55.2°C
Vapor pressure: 240 mm Hg at 20°C
Freezing point: -108.6°C
Refractive index: 1.3689 at 20°C
Density: 0.741 g/mL (6.18 lb/gal) at 20°C
Dipole moment: 1.32 D at 25°C
Solvent group: 1
Polarity index (P'): 2.5
Elutropic value on alumina: 0.3-0.4
Viscosity: 0.27 cP at 20°C
Surface tension: 19.4 dyn/cm at 24°C
Solubility in water: 5% floats and mixes slowly
Solubility of water in methyl t-butyl ether: 1.5% at 20°C

Regulatory and Safety Data:

DOT Hazard Class: 3, Pkg Grp II, UN2398, Flammable Liquid
EPA applicable waste codes(s): D001
Flash point: -18°F (-27°C) by closed cup
Lower explosive limit: 2.5%
Upper explosive limit: 15.1%
Peroxide hazard: Very resistant to peroxide formation, but check for presence of peroxides before concentrating.
Threshold limit value: 40ppm ACGIH

Refer to Material Safety Data Sheet for additional regulatory, health and safety information.

Suggested Applications:

For HPLC, gas chromatography, pesticide residue analysis and spectrophotometry.