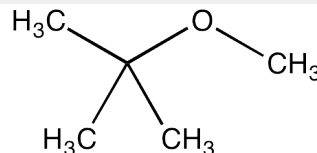


tert-Butyl methyl ether, for analysis, ExpertQ®, Reag. Ph Eur
Identification

$C_5H_{12}O$
M = 88,15 g/mol
CAS [1634-04-4]
EC number: 216-653-1
Taric code: 2909 19 90


Synonyms

Methyl tert-butyl ether, MTBE

Applications

analytical chemistry, laboratory reagent, chromatography, solvents, as gasoline additive.

Specifications

assay (G.C.).....	min. 99,5 %	chromium (Cr).....	max. 0,02 ppm
identity (IR-spectrum).....	passes test	cobalt (Co).....	max. 0,02 ppm
density (20°/4°).....	0,740 - 0,742	copper (Cu).....	max. 0,02 ppm
refractive index n ₂₀ /D.....	1,368 - 1,370	iron (Fe).....	max. 0,1 ppm
colour (Hazen).....	max. 10	lead (Pb).....	max. 0,1 ppm
acidity.....	max. 0,0005 meq/g	magnesium (Mg).....	max. 0,1 ppm
alkalinity.....	max. 0,0002 meq/g	manganese (Mn).....	max. 0,02 ppm
aluminium (Al).....	max. 0,5 ppm	nickel (Ni).....	max. 0,02 ppm
barium (Ba).....	max. 0,1 ppm	tin (Sn).....	max. 0,1 ppm
boron (B).....	max. 0,02 ppm	zinc (Zn).....	max. 0,1 ppm
cadmium (Cd).....	max. 0,05 ppm	peroxides (as H ₂ O ₂).....	max. 0,0005 %
calcium (Ca).....	max. 0,5 ppm	residue on evaporation.....	max. 0,001 %
		water (K.F.).....	max. 0,03 %

Physical data

- Density: 0,74 g/cm³
- Solub. in water: (10 °C): ~ 26 g/l
- Melting point: -110 °C
- Boiling point: 55 °C
- Flash point: -28 °C
- Ignition temperature: 460 °C
- Vapour pressure: (20 °C) 268 hPa
- Refraction index: (25 °C) 1,3664
- Viscosity: (20 °C) 0,27 mPas
- Evap. heat: (55 °C) 342 KJ/kg
- Expl. limit (upper): 8,4 Vol%
- Expl. limit (lower): 1,65 Vol%

Safety - GHS

Signal Word: Danger

Hazard Statements:

H225: Highly flammable liquid and vapour.
H315: Causes skin irritation.


Precautionary Statements:

P210: Keep away from heat / sparks / open flames / hot surfaces. - No smoking.
P241: Use explosion-proof electrical / ventilating / lighting / equipment.
P303+P361+P353: IF ON SKIN (or hair): Remove / Take off immediately all contaminated clothing. Rinse skin with water / shower.
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 II • UN 2398 • METHYL tert-BUTYL ETHER
- IMDG: 3 II • UN 2398 • METHYL TERT-BUTYL ETHER
- IATA/ICAO: 3 II • UN 2398 • METHYL TERT-BUTYL ETHER
- PAX: 353
- CAO: 364
- 10°C - 30°C