



PETRONAS

# METHYL TERTIARY BUTYL ETHER

PETRONAS CHEMICALS GROUP BERHAD  
CHEMISTRY FOR GROWTH



**PCG  
MTBE  
Plant**

**PETRONAS CHEMICALS  
MTBE SDN. BHD.**

- Gebeng, Pahang
- 300 KMTPA

**METHYL TERTIARY  
BUTYL ETHER (MTBE)**

Methyl Tertiary Butyl Ether (MTBE, tert-butyl methyl ether, tertiary butyl methyl ether or tBME) has the molecular formula  $(CH_3)_3COCH_3$ . A colourless liquid with a characteristic mild odour, its principal characteristics are miscibility with gasoline, low blending vapour pressure and distillation properties.

**Product  
Applications**

PRODUCT	DERIVATIVES		APPLICATIONS
MTBE	Fuel	Octane booster	• Gasoline blending for higher RON grade gasoline.
	Chemical	Pure Isobutylene	• Manufacturing of electronic display (flat screen tv, mobile phone screen) • Synthetic rubber tire manufacturing within automotive industry.
	Solvents	Arome chemicals	• Fragrances & flavor compositions for imitation of lemon, grapefruit, orange, mint for pharmaceuticals, cosmetics, oral & consumer products.
	Solvents	Solvent	• Pharmaceutical applications. • Paint thinner blending.

**Product  
Specifications**

COMPONENTS	UNITS	SPECIFICATIONS	METHODS
C4's	% Weight	0.5 max	ASTM D5441-98
Methanol	% Weight	0.5 max	ASTM D5441-98
MTBE	% Weight	98.0 min	ASTM D5441-98
Water Content	ppm weight	500 max	ASTM E1064-85
Density at 25°C	g/cm <sup>3</sup>	0.74 max	ASTM D4052-86
Total Sulphur	ppm weight	10.0 max	ASTM D5453-93 modified