



## **Technical Data Sheet**

# **DTBP**

Name: Di(Tert-Butyl)Peroxide

• Molar weight: 146.2 g/mol

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Properties		
Appearance	Colorless liquid	
Odor	Menthol	
Purity (GC)	> 98%	
Active oxygen (calculated)	> 10.4%	
Density at 20 °C	Approx. 0.79 g/cm <sup>3</sup>	
Viscosity at 20 °C	Approx. 0.8 mPa.s	
Vapor pressure at 25 °C	3.5 kPa	
Freezing point	< -29 °C	
Boiling point	The substance decomposes before boiling	
Miscibility	Immiscible with water, miscible with organic solvents	
Explosive properties	Non-explosive	
ТВНР	< 0.5%	
Cold storage stability	Liquid to below -25 °C	

### Description

Colorless, mobile liquid, consisting of technically pure Di(tert.butyl) peroxide. Dialkyl peroxide is used as an initiator (radical source) in the polymerization of monomers and crosslinking of polyethylene

#### Half-life data

Activation energy 35.1 kcal/mole

10 hr. half-life temp 126 °C

1 hr. half-life temp 149 °C

1 min. half-life temp 193 °C

## **Storage and Handling**

Recommended storage temperature: Below 40 °C

DTBP has to be handled with caution due to its potential in vivo genotoxic properties.

#### Safety

Peroxides and decomposition products are flammable and can ignite with explosive force if confined. May cause eye, skin, and respiratory tract irritation. The toxicological properties of this material have not been fully investigated.