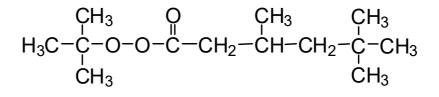
# **Technical Data Sheet**



# TBPIN

tert.Butylperoxy-3,5,5-trimethylhexanoate CAS#13122-18-4 Liquid, techn. pure Molar mass: 230.3 g/mol

# **Structural Formula**



### Description

Colourless, mobile liquid, consisting of technically pure tert.butylperoxy-3,5,5-trimethylhexanoate (tert.butylperisononanoate). This branched, aliphatic perester is used as an initiator (radical source) in the polymerisation of monomers (e.g. ethylene, styrene).

# **Technical Data**

Appearance	colourless liquid
Peroxide content	approx. 99 % w/w
Active oxygen (calculated)	approx. 6.88 % w/w
De-sensitising agent	none
Density at 20 °C	approx. 0.89 g/cm <sup>3</sup>
Viscosity at 20 °C	approx. 5.0 mPas
Refractive index at 20 °C	approx. 1.431
Critical temperature (SADT)	approx. 60 °C
Cold storage stability	to below -25 °C
Recommended storage temperature	below 25 °C
Storage stability (activity) as from date of delivery	3 months

This product is in compliance with the ElektroG (E U-Directives: RoHS 2002/95/EG, WEEE 2002/96/EG)

# Half-life-time

10 h/1 h/1 min (0.1 m/benzene): 100/119/160 °C

# **Technical Data Sheet**



# Application

# ETHYLENE:

Initiator for the high pressure polymerisation of ethylene in combination with other peroxides of varying degrees of activity. Temperature range: 190-240°C. Particular advantages: Liquid, readily miscible with high-boiling aliphatics.

# (METH)ACRYLATES:

Initiator for the polymerisation of (meth-)acrylates and allyl monomers, possibly in combination with more active peresters, e.g. tert.Butyl-per-2-ethyl hexanoate (TBPEH).

Temperature range: 90-130°C. Usage level: 0.1-1% as supplied.

### STYRENE:

Initiator for the polymerisation of styrene in bulk or solvent.

Temperature range: 100-140°C. Usage level: 0.02-0.1% as supplied. Particular advantage: reduction of residual monomer content in the polymer. A constant rate of polymerisation can be achieved in combination with more active peresters, e.g. tert.Butyl per-2-ethylhexanoate (TBPEH).

#### **Standard Packaging**

25kg in HDPE canisters

#### Disclaimer

This information and all further technical advice are reflecting our present knowledge and experience based on internal tests with local raw materials with the purpose to inform about our products and applications. The information should not be construed as guaranteeing specific properties of products described or their suitability for a particular application, nor as providing complete instructions for use. The information implies no guarantee for product and shelf life properties, nor any liability or other legal responsibility on ur part, including with regard to existing third party intellectual property rights, especially patent rights. We reserve the right to make any changes according to technological progress or further developments.

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Revision number: 1.0. Date: 10.12.2015. Device M: TDS.