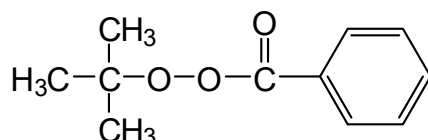


TBPB

Tert. Butylperoxybenzoate
CAS#614-45-9
Molar Mass: 194.2 g/mol
Liquid, technical pure

Structural Formula



Description

Yellowish, mobile liquid, consisting of technically pure tert. Butylperoxy benzoate. This aromatic perester is used as an initiator (radical source) in the polymerization of monomers, e.g. ethylene, styrene, methacrylates.

Technical Data

Appearance	yellowish liquid
Peroxide content	ca. 99 % w/w
Active oxygen	ca. 8.16 % w/w
De-sensitising agent	None
Density at 20°C	ca. 1.04 g/cm ³
Viscosity at 20°C	ca. 8 mPa.s
Refractive index at 20°C	ca. 1.499
Critical temperature (SADT)	ca. 60°C
Cold storage stability	freezing point below ca. +10°C
Recommended storage temperature	10 to 40°C (104°F)
Storage stability (activity) as from date of delivery	6 months

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

Half-life Data

10h/1h/1min (0.1 m / benzene): 104°C / 124°C / 165°C

Application

ETHYLENE:

Initiator for the high pressure polymerisation of ethylene in combination with other peroxides of varying degrees of activity.

Temperature range: 200-250°C.

The product is liquid and readily miscible with high-boiling aliphatic hydrocarbons. At low temperatures and under high pressure, however, highly concentrated solutions can cause crystal precipitation in dosing pumps.

Disadvantage: formation of benzene as decomposition product, potential alternative could be tert.Butylperoxy-3,3,5-trimethylcyclohexane (TBPIN)

STYRENE:

Initiator for the polymerisation of styrene in bulk or suspension.

Temperature range: 100-140°C.

Usage level: 0.02-0.1% as supplied.

Particular advantages: reduction of residual monomer content in the polymer. We recommend the combination with more active peroxides, e.g. Dibenzoyl peroxide (BPO) or tert.Butylper-2-ethylhexanoate (TBPEH).

Disadvantage: formation of benzene as decomposition product, potential alternative could be tert.Butylperoxy-2-ethylhexylcarbonate (TBPEHC)

OTHER MONOMERS:

Initiator for the polymerisation of (meth)acrylates, and allyl monomers, where necessary in combination with more active peroxides, particularly Dibenzoyl peroxide or tert.Butylper-2-ethylhexanoate (TBPEH).

Temperature range: 100-140°C.

Usage level: 0.1-1% as supplied.

Packaging

25kg in HDPE canister.

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 our 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.

Application and usage of our products based on our technical advice is out of our control and sole responsibility of the user. The user is not released from the obligation to conduct careful inspection and testing of incoming goods in order to verify the suitability for the intended application.

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