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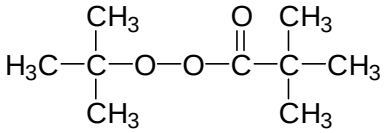
Technical Data Sheet

Polymerization
Peresters

TBPPI-75-AL1

tert.Butylperpivalate
CAS # 927-07-1
75% Solution in aliphatics



Molar mass: 174.2

Description:

Colorless, liquid, consisting of ca. 75%w/w tert.butylperpivalate, de-sensitized with aliphatic hydrocarbons. This branched, aliphatic perester is used as an initiator (radical source) in the polymerization of monomers e.g. ethylene, vinyl chloride, vinyl acetate.

Technical Data:

Appearance	colorless liquid
Peroxide content	ca. 75% w/w
Active oxygen	ca. 6.88 % w/w
De-sensitizing agent	aliphatics (b.p.>170°C)
Density at 20°C	ca. 0.85 g/cm^3
Viscosity at 20°C	ca. 2.7 mPa•s
Refractive index at 20°C	ca. 1.414
Half-life time: 10h/1h/1min (0.1 m / benzene)	56°C/74°C/110°C
Critical temperature (SADT)	ca. 25°C
Cold storage stability	liquid to below -15°C
Recommended storage temperature	-15 to -5°C
Maximum transport temperature	0°C
Storage stability as from date of delivery	3 months

Application:

ETHYLENE: Initiator for the high-pressure polymerization of ethylene in combination with thermally more stable peroxides. Temperature range: 130-190°C. Particular advantages: highly efficient, liquid, readily miscible with high-boiling aliphatics.

VINYLCHLORIDE: Initiator for the polymerization in bulk or suspension. Temperature range: 50-65°C. Usage level: 0.04-0.1% as supplied. Particular advantages: non-oxidizing, liquid, therefore easy to dose. A constant rate of polymerization can be achieved with other peroxides of different activity, depending on the reaction temperature.

OTHER MONOMERS: Initiator for the polymerization in mass, suspension or solution of acryl nitrile, (meth-) acrylates and vinyl acetate. Temperature range: 50-80°C. Dosage: 0.04-0.1% as supplied. In combination with thermally more stable peroxides the residual monomer content in the polymer can be reduced.

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