Technical Data Sheet



TBPND

tert.Butylperneodecanoate CAS#26748-41-4 Molar mass: 244.4 g/mol Liquid, technically pure

Structural Formula

$$CH_3$$
 CH_3 CH_3

Description

Colourless, mobile liquid, consisting of technically pure t ert.butylperneodecanoate. This branched, aliphatic perester is used as an initiator (radical source) for the polymerisation of monomers, e.g. ethylene, vinyl chloride, vinyl acetate and in chemical synthesis.

Technical Data

| Appearance | colourless mobile liquid |
|---|--------------------------------|
| Peroxide content | approx. 99 % w/w |
| Active oxygen | approx. 6.41 % w/w |
| De-sensitising agent | none |
| Density at 20 ℃ | approx. 0.90 g/cm ³ |
| Viscosity at 20 ℃ | approx. 6 mPa·s |
| Refractive index at 20 ℃ | approx. 1.437 |
| Critical temperature (SADT) | approx. 15 ℃ |
| Cold storage stability | to below -25 ℃ |
| Recommended storage temperature | below -10 ℃ |
| Maximum transport temperature | -5 ℃ |
| Storage stability (activity) as from date of delivery | 3 months |
| | |

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

Half-life Data

10 h/1 h/1 min (0.1 m/benzene): 47 / 64 / 100 ℃

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Application

ETHYLENE:

Initiator for the high pressure polymerisation of ethylene in combination with thermally more stable peroxides.

Temperature range: 120-180 ℃.

Particular advantages: Liquid, easily miscible with high-boiling aliphatics, highly efficient.

VINYLCHLORIDE:

Initiator for mass or suspension polymerisation of vinylchloride (VCM). Temperature range: 50-65 °C.

Usage level: 0.05-0.15% as supplied.

Particular advantages: non-oxidising, liquid, therefore easy to dose, high activity. A constant rate of polymerisation can be achieved in combination with other, thermally more stable peroxides.

OTHER MONOMERS:

Initiator for the polymerisation in mass, suspension or solution of acrylnitrile, (meth-)acrylates, and vinylacetate.

Temperature range: 50-80 ℃.

Usage level: 0.04-0.1% as supplied.

In combination with thermally more stable peroxides the residual monomer content in the polymer can be reduced.

OTHER APPLICATIONS:

Radical source for chemical synthesis, where highly active radicals are required.

Standard Packaging

25kg in HDPE canister

Disclaimer

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