# Technical Data Sheet

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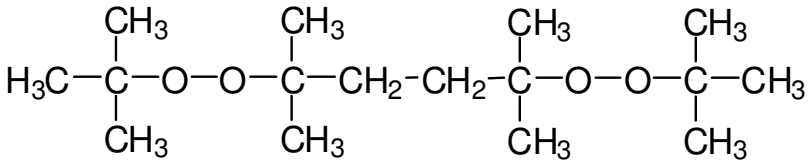
## DHBP-20-IC5

**2,5-Dimethyl-2,5-di (tert.butylperoxy) hexane**
**CAS#78-63-7**
**20% on PP carrier, pearls**
**Molar mass: 290.4 g/mol**

### Structural Formula



### Description

White pearls, consisting of approx. 20% w/w 2.5-Dimethyl 2.5-di(tert.butyl peroxy) hexane, on a polypropylene carrier. This bifunctional dialkyl peroxide can preferably be used as an initiator (radical source) to control rheology of polypropylene at above 200 °C.

### Technical Data

| | |
|---|---|
| Appearance | white pearls |
| Peroxide content | approx. 20 % w/w |
| Active oxygen (calculated) | approx. 2.2 % w/w |
| De-sensitising agent | polypropylene |
| Bulk density | approx. 0.42 kg/l |
| Critical temperature (SADT) | approx. 90 °C |
| Recommended storage temperature | below 40 °C |
| Storage stability as from date of delivery | 6 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): 120/142/190 °C

### Application

CR-POLYPROPYLEN:
A radical source to control the rheology of polypropylene.
Temperature range: 200-220 °C, usage level: 0.05-1.0% w/w of product as supplied, based on the polymer.

Advantage: Solid supply form, convenient dosing. Compatible with all PP types, enables homogeneous blending of initiator and polymer.

Vis-breaking effect is a considerably lower molecular weight, the statistical distribution is significantly narrower. Melt flow index (MFI), i.e. melt flow rate, is increased.

## "Vis-breaking"-Efficiency

| Influence of peroxide level on melt-flow index (MFI) of a commercial, unstabilised Polypropylene type | | | |
|---|---|---|---|
| % w/w Usage level (as supplied) | MFI [g/10 min] at 230°C / 2.16 kg | | |
| | DHBP-20-IC5 | DHBP-7.5-IC5 | DIPP-40-IC5 |
| - | 2.5 | 2.5 | 2.5 |
| 0.02 | 6 | 6 | 8 |
| 0.06 | 10 | 7 | 19 |
| 0.10 | 11 | 11 | 33 |
| 0.60 | 52 | 25 | 400 |
| 1.00 | 130 | 37 | - |

## Standard Packaging

20kg Cardboard box

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