

CRI-SIL Silicone Technologies, LLC
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DHBP-45-PSI

Product Description

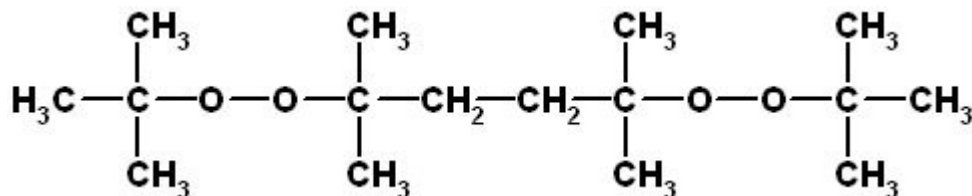
CRI-SIL DHBP-45-PSI (product code: CT0053) is a white paste consisting of approx. 45% 2,5-dimethyl-2,5-di(tert butylperoxy) hexane peroxide, desensitized silicone oil. This bifunctional dialky peroxide is used as an initiator (radical source) in the cross-linking of rubber at or about 170°C.

Typical Properties

Appearance/Consistency	White Paste
Peroxide Content, % (w/w)	45
Active Oxygen, % (w/w)	4.96
Critical Temperature, Celsius (SADT)	~90
Recommended Storage Temperature, Celsius	30
Storage Stability as from date of delivery, months	6
Half-Life time: 10h/1hr/1min (0.1 m/benzene), Celsius	120/142/190

Chemical Data

Chemical Name:	2,5-dimethyl-2,5-di(tert butylperoxy) hexane peroxide
Chemical Formula:	C ₁₆ H ₃₄ O ₄
CAS-No.	78-63-7
Molar Mass	290.4 g/mol





Application Information

Crosslinking information: DHBP-45-PSI peroxide designed for crosslinking many polymers and elastomers, especially silicone rubber (VQM, FVQM, PQVM).

Crosslinking temperature: is above 170°C, however, below 140°C no premature crosslinking (scorch) occurs.

Usage level: 1-6% of product as supplied on material to be cross-linked. With a few unreactive polymers, crosslinking efficiency can be improved by the addition of 1-5% of coagents (e.g. TAC or EDMA).

Special advantages of this peroxide:

- ✓ Efficient
- ✓ Very versatile for multiple polymers
- ✓ The powder form facilitates mixing and homogenization
- ✓ Has FDA acceptability under regulation 177.2600, rubber articles in repeated contact with food
- ✓ Volatile, odor free decomposition products
- ✓ No blooming on the vulcanized surface

Storage and Handling

DHBP-45-IC2 Catalyst can be used safely as long as the user understands the properties of the material and general precautions are taken. Since this material is an “oxidizing agent” and thermally stable at ambient temperatures some, slight gas evolution occurs. This material should be stored in an area that is less than 20C. It is flammable and should be kept away from open flames or any combustion able source. It will burn fiercely when ignited. If contaminated, decomposition or other reactions can occur followed by gas and heat. In extreme cases of contamination brought on by an action of heat, violent decomposition may take place liberating noxious flammable fumes. Contact with, for example, rags, clothing or combustible materials, organic materials may cause a pressure burst due to gas evolution. The material can cause severe damage to eyes, and is a skin irritant.

Additional Warnings

1. Organic Peroxides may cause eye and skin irritation. Wear gloves and goggles.
2. Danger of Hazardous Decomposition if exposed to heat or contamination. (May cause fire.)
3. Store in cool clean place 5- 30 degrees C. 41 to 86 degrees F. Keep away from direct sunlight.
4. Do not store in contact with amines, cobalt, vanadium accelerators, heavy metal salts, acids, alkalis, reducing compounds, flammable materials, combustibles, mild steel metal dusts.
5. Store any amount over 300lbs in a separate non-combustion able building with a separate blow off roof.
6. Get immediate medical attention if ingested or inhaled

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