

CRI-SIL Silicone Technologies, LLC
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TMCH

Product Description

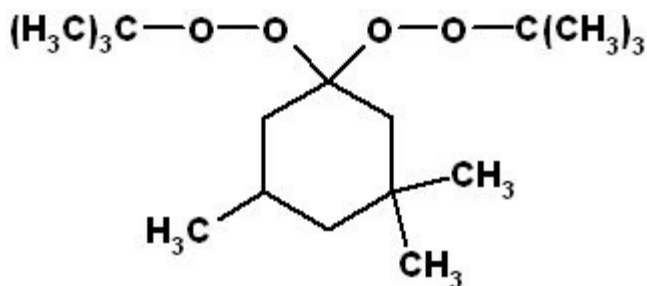
CRI-SIL TMCH (product code: CT0017) is a colorless, mobile liquid, consisting technically pure 1,1-bis(tert.butylperoxy)-3,3,5-trimethylcyclohexane peroxide. This cyclo-aliphatic peroxide is used as an initiator (radical source) for the polymerization of monomers (e.g. styrene) as well as in the curing of unsaturated polyester resins and the crosslinking of polymers.

Typical Properties

Appearance/Consistency	Colorless liquid
Peroxide Content, % (w/w)	98
Active Oxygen, % (w/w)	10.37
Critical Temperature, Celsius (SADT)	~60
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	95/114/155

Chemical Data

Chemical Name:	1,1-bis (tert.butylperoxy)-3,3,5-trimethylcyclohexane peroxide
Chemical Formula:	C ₁₇ H ₃₄ O ₄
CAS-No.	6731-36-8
Molar Mass	302.4 g/mol





Application Information

Special advantages of this peroxide:

- ✓ Decreases cure time
- ✓ Very versatile for multiple polymers
- ✓ Liquid: giving the ability to be pump-able. So-called “direct dosing” possible within the extruder but also tumbling of polymer powder and liquid peroxide within a drum mixer.
- ✓ No blooming on the vulcanized surface

Storage and Handling

TMCH 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.
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.
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. Keep away from direct sunlight.
6. Store any amount over 300lbs in a separate non-combustion able building with a separate blow off roof.
7. Wear gloves and goggles when handling this material.
8. Get immediate medical attention if ingested or inhaled

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