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ISO 9001:2008 Certified

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PRODUCT

DCLBP-50-PSI

Product Description

CRI-SIL DCLBP-50-PSI (product code: CT0027) is a white, stiff paste consisting of approx. 50% Di(2,4-dichlorobenzol) peroxide, desensitized with silicone oil. This halogenated kiaroyl peroxide is used as a source of radicals in the crosslinking of polymers above 100'C, primarily silicone rubber.

Specified Values

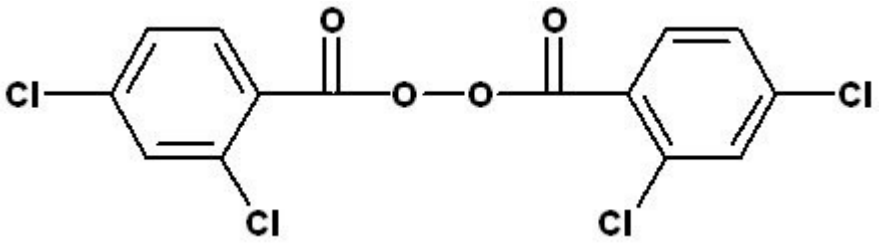
Di(2,4-Dichlorobenzoyl) Peroxide,%	49.0 -52.0
Active Oxygen, %	2.06 – 2.19

Typical Properties

Appearance/Consistency	White/Stiff Paste
Peroxide Content, % (w/w)	50
Active Oxygen, % (w/w)	2.1
Density at 20'C, g/cm^3	~1.2
Critical Temperature, Celsius (SADT)	~60
Cold Storage Stability (Freezing), Celsius	-25<
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	54/72/110

Chemical Data

Chemical Name:	Di(2,4-Dichlorobenzoyl) Peroxide
Chemical Formula:	C14H6O4C14
CAS-No.	133-14-2
Molar Mass	380.0 g/mol



Application Information

DCLBP-50-PSI peroxide is used as a catalyst for crosslinking a variety of synthetic rubbers, primarily silicone; at temperatures above 100°C (100-115°C cures should be done under pressure and then post-cured 12-24 hrs. at 150-250°C). Typical usage level is 1-2 phr of product as supplied. DDCBP-50 has the lowest activation temperature and the highest rate of cure of any of the common peroxides used in crosslinking. It is ideally suited for fast curing of thin cross-sections in continuous cures.

Special advantages of this peroxide:

- ✓ Not oxygen inhibited
- ✓ Can be used in hot air cures at atmospheric pressures at temperatures from 150-250°C.
- ✓ Decomposition products have a very low vapor pressure so porosity does not normally occur.
- ✓ Has FDA acceptability under regulation 177.2600, rubber articles in repeated contact with food.
- ✓ Another use of DDCBP-50 is in combination with other peroxides. This may allow de-molding of parts that would otherwise hot tear by first curing with the DDCBP-50 before the second peroxide becomes active. Post-curing then finishes cure.

Disadvantages:

- ✓ Caution must be used in dealing with the fast scorch times.
- ✓ The peroxide is sensitive to carbon blacks. Also, thick cross-sections may revert due to acid by-products of decomposition.

Storage and Handling

CRI-SIL DCLBP 50 PSI 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