

CRI-SIL Silicone Technologies, LLC
359 Hill Street
Biddeford, Maine 04005
(207) 283-6422

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-dichlorobenzoyl) 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

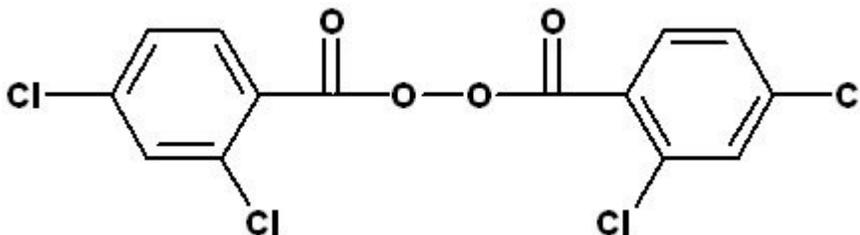
Di(2,4-Dichlorobenzoyl) Peroxide, %	49.0 -52.0
Active Oxygen, %	2.06 – 2.19

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
Standard Packaging	Plastic Pail (5 Gal), 44lbs

Chemical Data

Chemical Name:	Di(2,4-Dichlorobenzoyl) Peroxide
Chemical Formula:	C ₁₄ H ₆ O ₄ Cl ₄
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

The information and data contained herein are based on information we believe reliable. Each user of the material should thoroughly test any application and independently conclude satisfactory performance before commercializing. Suggestions of uses should not be taken as inducements to infringe any patent. These values are not to be used to set specifications. Each user must evaluate this product for his or her intended use. All information is given in good faith, without warranty, representation, inducement or a license of any kind. CRI-SIL does not assume any legal responsibility for use of or reliance upon same. No warranty or representation is given that CRI-SIL products described will be suitable in buyers and or users formulations or processes for any particular end use. No representation is given as to freedom from patent infringement. Materials not manufactured or supplied by CRI-SIL may present hazards in handling and use. Contact supplier or the manufacturer for all information specific to this these matters.