



G E O
SPECIALTY CHEMICALS

MATERIAL SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Link-Cup® DBPH50C
SYNONYMS: Dialkyl peroxide

SUPPLIER: GEO Specialty Chemicals, Inc.
 340 Mathers Road
 Ambler, PA 19002-3420
 1-267-960-7900

NFPA Rating: NFPA 432 - Organic Peroxide Classification: Class V
HMIS Classification: Health: 1 Flammability: 1 Reactivity: 1

EMERGENCY TELEPHONE: **CHEMTREC: (800) 424-9300**
 Outside USA - (703) 527-3887 collect calls accepted

EMERGENCY OVERVIEW:

White powder. Mild Odor. Organic Peroxide. Reactive: Exposure to temperatures above 104° F (40° C) may cause violent decomposition. May cause eye, skin and respiratory irritation. May be harmful if swallowed.

2. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient / CAS No.	Weight %	OSHA - PEL's	ACGIH 2002 - TLV's
Calcium carbonate 471-34-1	34	None Established.	None Established.
2,5-Dimethyl-2,5-di-(tert-butylperoxy)hexane 78-63-7	50	None Established.	None Established.
Di-tert-butyl peroxide 110-05-4	1	None Established.	None Established.
Amorphous silica 7631-86-9	17 - 21	None Established.	None Established.

3. HAZARDS IDENTIFICATION

Hazard Information: Organic peroxide. May cause eye, skin and respiratory tract irritation.

Eye Contact: Causes mild eye irritation .

Inhalation: Dust may cause irritation of the respiratory tract.

Skin Contact: Causes mild skin irritation.

Ingestion: May cause irritation of the mouth, throat and stomach.

Aggravated Conditions: None known.

ACUTE OVEREXPOSURE: Skin, eye and respiratory irritation. Ingestion of large amounts of product may cause temporary uncontrolled urinary functions.

CHRONIC OVEREXPOSURE: Long term exposure to high dust concentrations may cause non-debilitating lung changes.

4. FIRST AID MEASURES

Inhalation:	If inhaled, remove to fresh air. If not breathing give artificial respiration, preferably mouth-to-mouth. If breathing is difficult give oxygen. Get medical attention.
Skin Contact:	Immediately flush skin with plenty of soap and water for at least 15 minutes. Get medical attention.
Eye Contact:	Remove contact lenses. Immediately flush with plenty of water for at least 15 minutes, holding eyelids apart to ensure flushing of the entire surface. Washing within one minute is essential to achieve maximum effectiveness. Seek medical attention.
Ingestion:	Do not induce vomiting. If vomiting should occur spontaneously, keep the airway clear. Get medical attention. Never give anything by mouth to an unconscious person.
Notes To Physician:	None

5. FIRE FIGHTING MEASURES

Flash Point (°F/°C)	106° F (41° C), c.c.
Flash Point Method:	Setaflash
Autoignition Temp. (°F):	Not Determined
Flammable Limits in Air - Lower (%):	Not Determined
Flammable Limits in Air - Upper (%):	Not Determined
Extinguishing Media:	Water fog, carbon dioxide, foam, dry chemical.
Fire Fighting Procedures:	Cool exposed containers with water spray after extinguishing fire.
Special Exposure Hazards:	Use water spray to cool fire exposed surfaces.
Special Protective Equipment:	Fire fighters should wear full protective clothing, including self-contained breathing equipment.

6. ACCIDENTAL RELEASE MEASURES

Procedure for Cleaning/Absorption:	Evacuate area of all unnecessary personnel. Remove all sources of ignition. Ventilate area of leak or spill. Clean up immediately by sweeping or shoveling material into a properly labeled container for disposal. Transfer into labeled polyethylene-lined disposal containers using non-sparking equipment. Do not flush to sewer or surface waters! Do not mix with other products or wastes. Wear adequate personal protective clothing and equipment. Observe storage temperature of <104° F (40° C).
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7. HANDLING AND STORAGE

PRECAUTIONARY STATEMENTS:	WARNING! ORGANIC PEROXIDE.
Handling:	Organic peroxide. Causes irritation. Harmful if absorbed through the skin, swallowed, or inhaled. Avoid contact with eyes, skin and clothing. Avoid contact with vapors from heated material. Avoid contamination of food, beverage, or smoking materials. Avoid release to the environment. Keep containers tightly closed when not in use. Use only in a well ventilated area. Wear chemical splash goggles, gloves and protective clothing when handling. Wash thoroughly with soap and water after handling. Do not take internally. For industrial use only.
Storage:	Store in a cool, dry place away from ignition sources and open flame. Store below 104° F (40° C). Avoid storing product near incompatible materials. See MSDS Section 10.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls:	Local exhaust ventilation as necessary to maintain exposures to within applicable limits. Please refer to the ACGIH document, "Industrial Ventilation, A Manual of Recommended Practices", most recent edition, for details.
Respiratory Protection:	When exposures exceed the PEL or TLV, use NIOSH/MSHA approved respirator in accordance with OSHA Respiratory Protection Requirements under 29 CFR 1910.134.
Gloves:	Butyl rubber.
Skin Protection:	Normal work coveralls.
Eye Protection:	Chemical goggles or a face shield if splashing hazard exists.
Other Personal Protection Data:	Eyewash fountains and safety showers must be easily accessible.

Where special or unusual uses or conditions exist, it is suggested that the expert assistance of an industrial hygienist or other qualified professional be sought.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	FREE-FLOWING POWDER
Color:	WHITE
Odor:	MILD
pH:	Not Applicable
Specific Gravity (Water=1):	1.248
Density @ 20° C:	0.48 g/cc (Bulk density)
Boiling Point (°F/°C):	Not Determined
Melting Point Range (°F/°C):	Not Determined
Freezing Point/Range (°F/°C):	Not Determined
Vapor Pressure:	Not Determined
Vapor Density (Air=1):	Not Determined
% Volatile by Volume:	45 - 48 (w/w)
Evaporation Rate (BuAc=1):	< 1 (ethyl ether=1)
Solubility in Water Description:	Negligible
VOCs (lbs/gallon):	Not Determined
Viscosity, Dynamic (Centipoise) @ 20° C:	Not Determined
Molecular Weight:	Not Applicable

10. STABILITY AND REACTIVITY

Chemical Stability:	Stable under normal conditions of handling, use and transportation.
Conditions to Avoid:	Keep away from heat, sparks and flame. Avoid any source of ignition. Avoid direct sunlight. Avoid temperatures above 104° F (40° C).
Materials to Avoid:	Combustible materials. Acids. Oxidizing agents. Reducing agents. Accelerators. Corrosives. Metals.
Hazardous Decomposition Products:	Carbon Monoxide and Carbon Dioxide. Hydrocarbons.
Hazardous Polymerization:	Not anticipated under normal or recommended handling and storage conditions.
Additional Guidelines:	None.

11. TOXICOLOGICAL INFORMATION

PRINCIPAL ROUTES OF EXPOSURE:	Skin, eyes and respiratory tract.
Ingestion:	May cause irritation of the mouth, throat and stomach.
Skin Contact:	Causes mild skin irritation.
Inhalation:	Dust may cause irritation of the respiratory tract.
Eye Contact:	Causes mild eye irritation.

Carcinogenicity Status

(Chemical Name, Wt. %, CAS No.)

Calcium carbonate 34 - 35 471-34-1
IARC Group 1, Group 2A or Group 2B Carcinogen: Not Listed
National Toxicology Program Known or Suspect Carcinogen: Not Listed
ACGIH Confirmed or Suspected Carcinogen: Not Listed
OSHA Select or Possible Select Carcinogen: Not Listed

2,5-Dimethyl-2,5-di-(tert-butylperoxy)hexane 45 - 48 78-63-7
IARC Group 1, Group 2A or Group 2B Carcinogen: Not Listed
National Toxicology Program Known or Suspect Carcinogen: Not Listed
ACGIH Confirmed or Suspected Carcinogen: Not Listed
OSHA Select or Possible Select Carcinogen: Not Listed

Di-tert-butyl peroxide 1 110-05-4
IARC Group 1, Group 2A or Group 2B Carcinogen: Not Listed
National Toxicology Program Known or Suspect Carcinogen: Not Listed
ACGIH Confirmed or Suspected Carcinogen: Not Listed
OSHA Select or Possible Select Carcinogen: Not Listed

Amorphous silica 17 - 21 7631-86-9
IARC Group 1, Group 2A or Group 2B Carcinogen: Not Listed
National Toxicology Program Known or Suspect Carcinogen: Not Listed
ACGIH Confirmed or Suspected Carcinogen: Not Listed
OSHA Select or Possible Select Carcinogen: Not Listed

Acute Oral LD50 (mg/kg): 32,000 mg/kg, rat -DBPH
Acute Dermal LD50 (mg/kg): Not Determined
Acute Inhalation LC50 (mg/l): Not Determined
Mutagenicity/Genotoxicity: No mutagenicity or genotoxicity studies have been carried out with this product.
Other Information: Skin and lung irritant.

12. ECOLOGICAL INFORMATION

Mobility: Not Determined
Persistence: Not Determined
Bioaccumulative: Not Determined
Ecotoxicological Information:
 Acute Fish Toxicity: Not Determined
 Acute Crustaceans Toxicity: Not Determined
 Acute Algae Toxicity: Not Determined
Chemical Fate Information: Not Determined
Other Information: No ecological studies have been carried out on this product.

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method:
Dispose of product in an approved industrial waste landfill or incinerate in accordance with applicable Federal, state and local regulations.

RCRA

Is the unused product a RCRA hazardous waste if discarded? (Yes/No) Yes
If yes, the EPA Hazardous Waste Code is: D003 (reactivity)

14. TRANSPORTATION INFORMATION

DOT:

DOT Status: REGULATED MATERIAL.
DOT Shipping Name: ORGANIC PEROXIDE TYPE E, SOLID, (2,5-DIMETHYL-2,5-DI-[t-BUTYLPEROXY] HEXANE, 50%)
UN/NA Number: UN 3108
Hazard Class: 5.2
DOT Packing Group: II
ERG#: 145
Harmonized Tariff Number: 3815.19.0000

ICAO/IATA:

Status: REGULATED MATERIAL.
Proper Shipping Name: ORGANIC PEROXIDE TYPE E, SOLID, (2,5-DIMETHYL-2,5-DI-[t-BUTYLPEROXY] HEXANE, 50%)
UN/NA Number: UN 3108
IATA-DGR Class: 5.2
Packing Group: NONE
Special Provisions: A20 - During the course of transport, this substance must be protected from direct sunshine and stored in a cool and well ventilated place, away from all sources of heat. A statement to this effect must be included on the Shipper's Declaration.

IMDG:

Status: REGULATED MATERIAL.
Proper Shipping Name: ORGANIC PEROXIDE TYPE E, SOLID, (2,5-DIMETHYL-2,5-DI-[t-BUTYLPEROXY] HEXANE, 50%)
UN/NA Number: UN 3108
Hazard Class: 5.2
Packing Group: NONE
EMS No.: F-J, S-R
Flash Point (°F/°C) 106° F (41° C), c.c.

15. REGULATORY INFORMATION

International Inventories:

USA TSCA Inventory Status: All of the components of this product are listed on the US EPA TSCA Inventory, or exempt from listing.
Canadian DSL: All of the components of this product are listed on the Canadian Domestic Substances List.
European - EINECS: All of the components of this product are listed on EINECS, or exempt from notification.
Japanese Chemical Inventory: All of the components of this product are listed on the JPENCS Inventory.
Philippines Chemical Inventory: All of the components of this product are found on the Philippines Inventory.
Australian Chemical Inventory: All of the components of this product are listed on the Australian Chemical Inventory.
Korean Chemical Inventory: All of the components of this product are found on the Korean Existing Chemical Substances List.

State and Federal Regulations:
(Chemical Name, Wt. %, CAS No.)

2,5-Dimethyl-2,5-di-(tert-butylperoxy)hexane 45 - 48 78-63-7
New Jersey Right-to-Know List: Listed
Di-tert-butyl peroxide 1 110-05-4
New Jersey Right-to-Know List: Listed
Pennsylvania Right to Know List: Listed
Massachusetts Right to Know Law: Listed
Rhode Island Hazardous Substance List Listed

Amorphous silica 17 - 21 7631-86-9
New Jersey Right-to-Know List: Listed
Pennsylvania Right to Know List: Listed
Massachusetts Right to Know Law: Listed
Minnesota Hazardous Substance List Listed

New Jersey Trade Secret Registry Number(s): N/A

SARA Section 311/ 312 Hazard Class: This product is classified as a SARA ACUTE HEALTH HAZARD.
This product is classified as a SARA FIRE HAZARD.
This product is classified as a SARA REACTIVE HAZARD.

Other Information: This product does not contain any ingredients subject to the reporting requirements of SARA Title III, Section 313 (40 CFR Part 372).

16. OTHER INFORMATION

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Telephone Number: (267) 960-7926

Reference Number: 114530 PD

Revision Date: 12/22/2005

Additional Information: None.

Important Note: The information herein is given in good faith but no warranty, expressed or implied, is made.

END OF MSDS