



MATERIAL SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Link-Cup™ NBV40C
SYNONYMS: n-Butyl-4,4-di(tert-butyl-peroxy)valerate on inert filler
SUPPLIER: GEO Specialty Chemicals, Inc.
340 Mathers Road
Ambler, PA 19002-3420
1-267-960-7900
HMIS Classification: Health: 1 Flammability: 1 Reactivity: 1

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

EMERGENCY OVERVIEW:

Off-white powder. Fruity odor. Organic Peroxide. Reactive: Exposure to temperatures above 140° F (60° 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
Butyl 4,4-di-(tert-butylperoxy)-valerate 995-33-5	40-42	None Established.	None Established.
Calcium Carbonate 471-34-1	21-25	None Established.	None Established.
Silica 7631-86-9	34-35	None Established.	None Established.

3. HAZARDS IDENTIFICATION

Hazard Information: Organic peroxide. May cause eye, skin and respiratory tract irritation. Peroxides and peroxide decomposition products are flammable and can ignite with explosive force if confined.

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.

MARKETED BY
**HARWICK STANDARD
DISTRIBUTION CORPORATION**
60 S. Seiberling Street • Akron, Ohio 44305

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:	Wash thoroughly with soap and water, remove contaminated clothing and footwear. Wash clothing before reuse. Get medical attention if irritation should develop.
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:	Not an ingestion hazard under anticipated conditions of use. For accidental ingestion if conscious, drink one to two glasses of water (8-16 oz.). 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:	Large volumes of ingested material should be removed by gastric lavage with a large bore tube, being careful not to cause aspiration of the compound during removal of the tube.

5. FIRE FIGHTING MEASURES

Flash Point (°F/°C)	Not Determined
Flash Point Method:	NA
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. Fight fire from a safe distance and from a protected location. Do not allow runoff to enter waterways. Peroxides and peroxide decomposition products are flammable and can ignite with explosive force if confined. This product can produce flammable vapors which may travel to a source of ignition and flash back.
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. Do not flush to sewer or surface waters! Do not mix with other products or wastes. Wear adequate personal protective clothing and equipment.
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7. HANDLING AND STORAGE

PRECAUTIONARY STATEMENTS:	WARNING! ORGANIC PEROXIDE.
Handling:	Causes irritation. Avoid contact with eyes, skin and clothing. Avoid contact with vapors from heated material. Wash thoroughly with soap and water after handling. Do not take internally. For industrial use only. Avoid breathing dust; if exposed to high dust concentration, leave area immediately. Emptied container may retain product residues. 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. Follow all warnings and precautions even after container is emptied. Harmful if swallowed or inhaled.
Storage:	Avoid storing product near incompatible materials. See MSDS Section 10. Keep in tightly closed container. Store below 86° F (30° C). Store in a cool, dry place away from ignition sources and open flame.

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:	Appropriate chemical resistant gloves should be worn.
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:	POWDER
Color:	WHITE
Odor:	FRUITY
pH:	Not Applicable
Specific Gravity (Water=1):	1.56 @ 68° F (20° C)
Density @ 20° C:	Not Determined
Boiling Point (°F/°C):	N/A (Decomposition)
Melting Point Range (°F/°C):	Not Determined
Freezing Point/Range (°F/°C):	Not Determined
Vapor Pressure:	Not Determined
Vapor Density (Air=1):	Not Determined
Evaporation Rate (BuAc=1):	Not Determined
Solubility in Water Description:	Insoluble
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 temperatures and pressures. Temperatures above 140° F (60° C) may lead to exothermic decomposition.
Conditions to Avoid:	Keep away from heat, sparks and flame. Avoid any source of ignition.
Materials to Avoid:	Strong acids. Strong alkalies. Accelerators. Reducing agents. Strong oxidizers.
Hazardous Decomposition Products:	Carbon Monoxide and Carbon Dioxide.
Hazardous Polymerization:	Not anticipated under normal or recommended handling and storage conditions.
Additional Guidelines:	For this product, the SADT (UN-Test H.4) is 140° F (60° C).

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.)

Butyl 4,4-di-(tert-butylperoxy)-valerate 40-42 995-33-5

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

Calcium Carbonate 21-25 471-34-1

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

Silica 34-35 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): The oral LD50 for the peroxide (40% in calcium carbonate) is greater than 5000 mg/kg (practically non-toxic).

Acute Dermal LD50 (mg/kg): The peroxide (40% on calcium carbonate) has been shown to be mildly irritating to rabbits following a 24 hour exposure.

Acute Inhalation LC50 (mg/l): The effects of this product are not known. The product is expected to cause mild respiratory tract irritation.

Mutagenicity/Genotoxicity: No mutagenicity or genotoxicity studies have been carried out with this product.

Other Information: The carcinogenic properties of this product are not known.

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)
If yes, the EPA Hazardous Waste Code is:

Yes
D003 (reactivity)

14. TRANSPORTATION INFORMATION

DOT:

DOT Status: REGULATED MATERIAL.
DOT Shipping Name: ORGANIC PEROXIDE TYPE E, SOLID, (n-BUTYL-4,4-DI-[t-BUTYLPEROXY] VALERATE, 40%)
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, (n-BUTYL-4,4-DI-[t-BUTYLPEROXY] VALERATE, 40%)
UN/NA Number: UN 3108
IATA-DGR Class: 5.2
Packing Group: NONE
ERG Code: 145
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, (n-BUTYL-4,4-DI-[t-BUTYLPEROXY] VALERATE, 40%)
UN/NA Number: UN 3108
Hazard Class: 5.2
Packing Group: NONE
EMS No.: F-J, S-R
Flash Point (°F/°C) Not Determined

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.)

Butyl 4,4-di-(tert-butylperoxy)-valerate 40-42 **995-33-5**
New Jersey Right-to-Know List: Listed

Silica 34-35 **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 N/A
Number(s):

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

Prepared / Edited By: Peter R. Dluzneski - Manager of Technology
Telephone Number: (267) 960-7926
Reference Number: 114550 PD
Revision Date: 05/04/2005
Additional Information: None.
Important Note: The information herein is given in good faith but no warranty, expressed or implied, is made.

END OF MSDS