



Revision Number: 006.0

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**1. PRODUCT AND COMPANY IDENTIFICATION**

<b>Product name:</b>	<b>LOCTITE FREKOTE 44-NC known as FREKOTE 44-NC 1GA EN</b>	<b>IDH number:</b>	416020
<b>Product type:</b>	Mold Release	<b>Item number:</b>	83434
<b>Restriction of Use:</b>	None identified	<b>Region:</b>	United States
<b>Company address:</b>	Henkel Corporation One Henkel Way Rocky Hill, Connecticut 06067	<b>Contact information:</b>	Telephone: +1 (860) 571-5100 MEDICAL EMERGENCY Phone: Poison Control Center 1-877-671-4608 (toll free) or 1-303-592-1711 TRANSPORT EMERGENCY Phone: CHEMTREC 1-800-424-9300 (toll free) or 1-703-527-3887 Internet: www.henkelna.com

Contains one or more components for which a Toxic Substances Control Act (TSCA) Low Volume Exemption (LVE) applies. See Section 15.

**2. HAZARDS IDENTIFICATION**

**EMERGENCY OVERVIEW**

**WARNING:** FLAMMABLE LIQUID AND VAPOR.  
CAUSES SKIN IRRITATION.  
CAUSES SERIOUS EYE IRRITATION.  
MAY CAUSE RESPIRATORY IRRITATION.

HAZARD CLASS	HAZARD CATEGORY
FLAMMABLE LIQUID	3
SKIN IRRITATION	2
EYE IRRITATION	2A
SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE	3

**PICTOGRAM(S)**



**Precautionary Statements**

<b>Prevention:</b>	Keep away from heat, sparks, open flames, hot surfaces - no smoking. Keep container tightly closed. No release into water. Use explosion-proof equipment. Use non-sparking tools. Take action to prevent static discharges. Avoid breathing vapors, mist, or spray. Wash affected area thoroughly after handling. Use only outdoors or in a well-ventilated area. Wear protective gloves, eye protection, and face protection.
<b>Response:</b>	If on skin (or hair): Take off immediately all contaminated clothing. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or physician if you feel unwell. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If skin irritation occurs: Get medical attention. If eye irritation persists: Get medical attention. Take off contaminated clothing. In case of fire: Use foam, dry chemical or carbon dioxide to extinguish.
<b>Storage:</b>	Store in a well-ventilated place. Keep container tightly closed. Store in a well-ventilated place. Keep cool. Store locked up.
<b>Disposal:</b>	Dispose of contents and/or container according to Federal, State/Provincial and local governmental regulations.

Classification complies with OSHA Hazard Communication Standard (29 CFR 1910.1200) and is consistent with the provisions of the United Nations Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

See Section 11 for additional toxicological information.

### 3. COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous Component(s)	CAS Number	Percentage*
Dibutyl ether	142-96-1	90 - 100
Reaction product of tris(n-methylamino)methylsilane (TMAS) and silanol terminated polydimethylsiloxane (PDMS)	1432471-92-5	1 - 5

\* Exact percentages may vary or are trade secret. Concentration range is provided to assist users in providing appropriate protections.

### 4. FIRST AID MEASURES

<b>Inhalation:</b>	Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention.
<b>Skin contact:</b>	Immediately flush skin with plenty of water (using soap, if available). Remove contaminated clothing and footwear. If symptoms develop and persist, get medical attention. Wash clothing before reuse.
<b>Eye contact:</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.
<b>Ingestion:</b>	Do not induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention.
<b>Symptoms:</b>	See Section 11.

### 5. FIRE FIGHTING MEASURES

<b>Extinguishing media:</b>	Foam, dry chemical or carbon dioxide. Do not use high volume water jet.
<b>Special firefighting procedures:</b>	Wear self-contained breathing apparatus and full protective clothing, such as turn-out gear. Water may be unsuitable as an extinguishing media, but may be helpful in keeping adjacent containers cool. Keep personnel upwind of fire.
<b>Unusual fire or explosion hazards:</b>	This product may form explosive peroxides. Vapors may form explosive mixtures with air. Do not handle or store near an open flame, heat or other sources of ignition. Hydrocarbon solvents are basically non-conductors of electricity and can become electrostatically charged during mixing, filtering or pumping at high flow rates. If this charge reaches a significantly high level, sparks can form that may ignite vapors of flammable liquids.
<b>Hazardous combustion products:</b>	Oxides of carbon. Irritating organic vapours.

### 6. ACCIDENTAL RELEASE MEASURES

Use personal protection recommended in Section 8, isolate the hazard area and deny entry to unnecessary and unprotected personnel.

<b>Environmental precautions:</b>	Do not allow product to enter sewer or waterways. Advise authorities if product has entered or may enter sewers, water sources or extensive land areas. Prevent further leakage or spillage if safe to do so. This product is insoluble in water and will float on surface.
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**Clean-up methods:**

Remove all sources of ignition. Ventilate area. Keep upwind of the spilled material and isolate exposure. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Store in a partly filled, closed container until disposal. Refer to Section 8 "Exposure Controls / Personal Protection" prior to clean up.

## 7. HANDLING AND STORAGE

**Handling:**

During use and until all vapors are gone: Keep area ventilated - do not smoke; extinguish all flames, pilot lights, and heaters; turn off stoves, electrical tools and appliances, and any other sources of ignition. Make sure containers are properly grounded before use or transfer of material. Prevent contact with eyes, skin and clothing. Do not breathe vapor and mist. Wash thoroughly after handling. Do not taste or swallow. For operations where eye or face contact could occur, provide safety shower and eyewash fountain.

**Storage:**

For safe storage, store at or below 48.8 °C (119.8 °F)  
Keep in a cool, well ventilated area away from heat, sparks and open flame.  
Keep container tightly closed until ready for use.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Employers should complete an assessment of all workplaces to determine the need for, and selection of, proper exposure controls and protective equipment for each task performed.

Hazardous Component(s)	ACGIH TLV	OSHA PEL	AIHA WEEL	OTHER
Dibutyl ether	None	None	None	None
Reaction product of tris(n-methylamino)methylsilane (TMAS) and silanol terminated polydimethylsiloxane (PDMS)	None	None	None	None

**Engineering controls:**

Use explosion-proof mechanical ventilation and local exhaust to control contaminants to within their occupational exposure limits during the use of this product.

**Respiratory protection:**

Use a NIOSH approved supplied air respirator if the potential to exceed established exposure limits exists.

**Eye/face protection:**

Safety goggles or safety glasses with side shields. Full face protection should be used if the potential for splashing or spraying of product exists. Safety showers and eye wash stations should be available.

**Skin protection:**

Use chemical resistant, impermeable clothing including gloves and either an apron or body suit to prevent skin contact.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical state:</b>	Liquid
<b>Color:</b>	Colorless
<b>Odor:</b>	Mild, Solvent
<b>Odor threshold:</b>	Not available.
<b>pH:</b>	Not applicable
<b>Vapor pressure:</b>	33 mbar
<b>Boiling point/range:</b>	> 142 °C (> 287.6 °F) 1,013 hPa
<b>Melting point/ range:</b>	Not determined
<b>Specific gravity:</b>	0.769
<b>Vapor density:</b>	Heavier than air.
<b>Flash point:</b>	25 °C (77°F) Tagliabue closed cup
<b>Flammable/Explosive limits - lower:</b>	1.5 % (value for solvent)
<b>Flammable/Explosive limits - upper:</b>	7.6 % (value for solvent)
<b>Autoignition temperature:</b>	Not available.
<b>Flammability:</b>	Not applicable
<b>Evaporation rate:</b>	Slower than ether.

**Solubility in water:** Insoluble  
**Partition coefficient (n-octanol/water):** Not available.  
**VOC content:** 99.5 %; 746 g/l  
**Viscosity:** Not available.  
**Decomposition temperature:** Not available.

## 10. STABILITY AND REACTIVITY

**Stability:** Stable under normal conditions of storage and use. May form explosive peroxides with prolonged exposure to air or oxygen, especially under anhydrous conditions.  
**Hazardous reactions:** Will not occur.  
**Hazardous decomposition products:** Oxides of carbon. Hydrocarbons. Irritating organic vapours.  
**Incompatible materials:** Strong oxidizing agents. Strong acids and strong bases.  
**Reactivity:** Not available.  
**Conditions to avoid:** Exposure to air or moisture over prolonged periods. Heat, flames, sparks and other sources of ignition. Store away from incompatible materials.

## 11. TOXICOLOGICAL INFORMATION

**Relevant routes of exposure:** Skin, Inhalation, Eyes, Ingestion

### Potential Health Effects/Symptoms

**Inhalation:** May cause respiratory tract irritation.  
**Skin contact:** Causes skin irritation. Solvent action can dry and defat the skin, causing the skin to crack, leading to dermatitis.  
**Eye contact:** Causes serious eye irritation.  
**Ingestion:** May cause gastrointestinal tract irritation if swallowed.

Hazardous Component(s)	LD50s and LC50s	Immediate and Delayed Health Effects
Dibutyl ether	None	Irritant, Central nervous system, Cardiac, Kidney, Gastrointestinal, Mutagen
Reaction product of tris(n-methylamino)methylsilane (TMAS) and silanol terminated polydimethylsiloxane (PDMS)	None	No Data

Hazardous Component(s)	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)
Dibutyl ether	No	No	No
Reaction product of tris(n-methylamino)methylsilane (TMAS) and silanol terminated polydimethylsiloxane (PDMS)	No	No	No

## 12. ECOLOGICAL INFORMATION

**Ecological information:** Not available.

## 13. DISPOSAL CONSIDERATIONS

Information provided is for unused product only.

**Recommended method of disposal:** Follow all local, state, federal and provincial regulations for disposal.

**Hazardous waste number:** D001: Ignitable.

## 14. TRANSPORT INFORMATION

The transport information provided in this section only applies to the material/formulation itself, and is not specific to any package/configuration.

### U.S. Department of Transportation Ground (49 CFR)

**Proper shipping name:** Resin solution  
**Hazard class or division:** 3  
**Identification number:** UN 1866  
**Packing group:** III

### International Air Transportation (ICAO/IATA)

**Proper shipping name:** Resin solution  
**Hazard class or division:** 3  
**Identification number:** UN 1866  
**Packing group:** III

### Water Transportation (IMO/IMDG)

**Proper shipping name:** RESIN SOLUTION  
**Hazard class or division:** 3  
**Identification number:** UN 1866  
**Packing group:** III

## 15. REGULATORY INFORMATION

### United States Regulatory Information

**TSCA 8 (b) Inventory Status:** All components of this product are listed on the U.S. Toxic Substances Control Act (TSCA) inventory or are exempt from listing because a Low Volume Exemption (LVE) has been granted in accordance with 40 CFR 723.50.

**TSCA 12 (b) Export Notification:** None above reporting de minimis

**CERCLA/SARA Section 302 EHS:** None above reporting de minimis.

**CERCLA/SARA Section 311/312:** Immediate Health, Delayed Health, Fire

**CERCLA/SARA Section 313:** None above reporting de minimis.

**CERCLA Reportable quantity:** Dibutyl ether (CAS# 142-96-1) 100 lbs. (45.4 kg)

**California Proposition 65:** No California Proposition 65 listed chemicals are known to be present.

### Canada Regulatory Information

**CEPA DSL/NDSL Status:** One or more components are not listed on, and are not exempt from listing on either the Domestic Substances List or the Non-Domestic Substances List.

## 16. OTHER INFORMATION

This safety data sheet contains changes from the previous version in sections: 2

**Prepared by:** Product Safety and Regulatory Affairs

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