



Revision Number: 009.0

Issue date: 01/08/2020

**1. PRODUCT AND COMPANY IDENTIFICATION**

|                               |                                                                                   |                     |               |
|-------------------------------|-----------------------------------------------------------------------------------|---------------------|---------------|
| <b>Product name:</b>          | <b>LOCTITE FREKOTE FMS known as FREKOTE® FMS™ MOLD SEALER PART PART NO. 38413</b> | <b>IDH number:</b>  | 548976        |
| <b>Product type/use:</b>      | Mold Release                                                                      | <b>Item number:</b> | 38413         |
| <b>Restriction of Use:</b>    | None identified                                                                   | <b>Region:</b>      | United States |
| <b>Company address:</b>       | <b>Contact information:</b>                                                       |                     |               |
| Henkel Corporation            | Telephone: +1 (860) 571-5100                                                      |                     |               |
| One Henkel Way                | MEDICAL EMERGENCY Phone: Poison Control Center                                    |                     |               |
| Rocky Hill, Connecticut 06067 | 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**

**DANGER:** FLAMMABLE LIQUID AND VAPOR.  
MAY BE FATAL IF SWALLOWED AND ENTERS AIRWAYS.  
CAUSES SKIN IRRITATION.  
CAUSES SERIOUS EYE IRRITATION.  
MAY CAUSE RESPIRATORY IRRITATION.  
MAY CAUSE DROWSINESS OR DIZZINESS.

| HAZARD CLASS                                     | HAZARD CATEGORY |
|--------------------------------------------------|-----------------|
| FLAMMABLE LIQUID                                 | 3               |
| SKIN IRRITATION                                  | 2               |
| EYE IRRITATION                                   | 2A              |
| SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE | 3               |
| ASPIRATION HAZARD                                | 1               |

**PICTOGRAM(S)**



**Precautionary Statements**

**Prevention:** 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.

**Response:** IF SWALLOWED: Immediately call a physician or poison control center. 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. Do NOT induce vomiting. 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.

**Storage:** Store in a well-ventilated place. Keep container tightly closed. Store in a well-ventilated place. Keep cool. Store locked up.

**Disposal:** 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* |
|---------------------------------------------------------------------------------------------------------------|--------------|-------------|
| Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, <2% aromatics                                           | 64742-48-9   | 60 - 80     |
| Dibutyl ether                                                                                                 | 142-96-1     | 10 - 30     |
| 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

**Inhalation:** Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention.

**Skin contact:** Remove contaminated clothing and footwear. Immediately flush skin with plenty of water (using soap, if available). If skin irritation persists, call a physician. Wash clothing before reuse.

**Eye contact:** Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get immediate medical attention.

**Ingestion:** Keep individual calm. Do not induce vomiting: contains petroleum distillates and/or aromatic solvents. If vomiting occurs, prevent aspiration by keeping the patient's head below the knees. Get immediate medical attention.

**Symptoms:** See Section 11.

### 5. FIRE FIGHTING MEASURES

**Extinguishing media:** Water spray (fog), foam, dry chemical or carbon dioxide. Do not use high volume water jet.

**Special firefighting procedures:** Keep personnel upwind of fire. 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.

**Unusual fire or explosion hazards:**

Vapors may form explosive mixtures with air. 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. Do not handle or store near an open flame, heat or other sources of ignition.

**Hazardous combustion products:**

Oxides of carbon. Irritating organic vapours. Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

## 6. ACCIDENTAL RELEASE MEASURES

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

**Environmental precautions:**

Prevent further leakage or spillage if safe to do so. This product is insoluble in water and will float on surface. 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.

**Clean-up methods:**

Ventilate area. Remove all sources of ignition. Keep upwind of the spilled material and isolate exposure. Wear suitable protective clothing, gloves and eye/face protection. Use non-sparking tools for clean-up. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, saw dust). Store in a partly filled, closed container until disposal.

## 7. HANDLING AND STORAGE

**Handling:**

Do not breathe gas/fumes/vapor/spray. For operations where eye or face contact could occur, provide safety shower and eyewash fountain. Avoid contact with eyes, skin and clothing. 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. Wash thoroughly after handling.

**Storage:**

For safe storage, store between 5 °C (41°F) and 25 °C (77°F) Store away from heat, sparks, flames, or other sources of ignition. Keep container closed.

## 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 |
|---------------------------------------------------------------------------------------------------------------|-----------|----------|-----------|-------|
| Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, <2% aromatics                                           | None      | None     | None      | None  |
| 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>                          | 28 mbar                          |
| <b>Boiling point/range:</b>                     | 141 °C (285.8 °F) 1,013 hPa      |
| <b>Melting point/ range:</b>                    | Not determined                   |
| <b>Specific gravity:</b>                        | 0.754                            |
| <b>Vapor density:</b>                           | Heavier than air.                |
| <b>Flash point:</b>                             | 31 °C (87.8 °F)                  |
| <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.               |
| <b>Solubility in water:</b>                     | Not miscible or difficult to mix |
| <b>Partition coefficient (n-octanol/water):</b> | Not available.                   |
| <b>VOC content:</b>                             | 99.25 %; 749 g/l                 |
| <b>Viscosity:</b>                               | Not available.                   |
| <b>Decomposition temperature:</b>               | Not available.                   |

## 10. STABILITY AND REACTIVITY

|                                          |                                                                                                                                                                                                                                                                                                                                           |
|------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Stability:</b>                        | Risk of ignition. May form explosive peroxides with prolonged exposure to air or oxygen, especially under anhydrous conditions. Stable under normal conditions of storage and use.                                                                                                                                                        |
| <b>Hazardous reactions:</b>              | None under normal processing.                                                                                                                                                                                                                                                                                                             |
| <b>Hazardous decomposition products:</b> | Peroxides. Hydrocarbons.                                                                                                                                                                                                                                                                                                                  |
| <b>Incompatible materials:</b>           | Strong acids and strong bases. Strong oxidizing agents. Reacts with air to form peroxides.                                                                                                                                                                                                                                                |
| <b>Reactivity:</b>                       | Not available.                                                                                                                                                                                                                                                                                                                            |
| <b>Conditions to avoid:</b>              | Avoid static discharge. Will slowly degrade with exposure to oxygen (air). Spray mist may be flammable at temperatures below the flash point. Keep away from open flames, hot surfaces and sources of ignition. Vapors may form explosive mixtures with air. Fire or intense heat may cause violent rupture of packages. Direct sunlight. |

## 11. TOXICOLOGICAL INFORMATION

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

**Potential Health Effects/Symptoms**

**Inhalation:** May cause respiratory tract irritation. May cause dizziness, incoordination, headache, nausea, and vomiting.  
**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:** This product may be fatal if it is swallowed. Aspiration may occur during swallowing or vomiting, resulting in lung damage.

| Hazardous Component(s)                                                                                        | LD50s and LC50s                                                                        | Immediate and Delayed Health Effects                                         |
|---------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|------------------------------------------------------------------------------|
| Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, <2% aromatics                                           | Inhalation LC50 (Rat, 4 h) = > 5.36 mg/l<br>Inhalation LC50 (Rat, 4 h) = > 8,530 mg/m3 | No Data                                                                      |
| 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) |
|---------------------------------------------------------------------------------------------------------------|----------------|-----------------|------------------------------------------|
| Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, <2% aromatics                                           | No             | No              | No                                       |
| 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 are listed as active or are exempt from listing on the Toxic Substances Control Act (TSCA) inventory. This product contains one or more components with a Low Volume Exemption (LVE) in accordance with 40 CFR 723.50. Quantities may be limited.

**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, Fire, Delayed Health  
**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/NDL 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: 14**

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

**Issue date:** 01/08/2020

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