**Revision Number:** 008.0 **Issue date:** 08/29/2016

## 1. PRODUCT AND COMPANY IDENTIFICATION

**Product name:** **LOCTITE SI 593 BK known as LOCTITE® Superflex® Black RTV**
**IDH number:** 193997
**Product type:** Sealant
**Restriction of Use:** None identified
**Region:** United States
**Company address:**
**Contact information:**
Telephone:
Emergency Telephone:

## 2. HAZARDS IDENTIFICATION

| EMERGENCY OVERVIEW | |
|---|---|
| DANGER: | CAUSES SKIN IRRITATION.<br>CAUSES SERIOUS EYE DAMAGE. |

| HAZARD CLASS | HAZARD CATEGORY |
|---|---|
| SKIN IRRITATION | 2 |
| SERIOUS EYE DAMAGE | 1 |

**PICTOGRAM(S)**



**Precautionary Statements**

**Prevention:** Wash affected area thoroughly after handling. Wear protective gloves, eye protection, and face protection.
**Response:** IF ON SKIN: Wash with plenty of water. 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. Take off contaminated clothing.
**Storage:** Not prescribed
**Disposal:** Not prescribed

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* |
|---|---|---|
| Distillates (petroleum), hydrotreated middle | 64742-46-7 | 5 - 10 |
| Silicon dioxide | 7631-86-9 | 5 - 10 |
| Silicone Resin | Proprietary | 1 - 5 |
| Substituted Silane | Proprietary | 1 - 5 |
| Substituted Silane | Proprietary | 1 - 5 |
| Carbon black | 1333-86-4 | 1 - 5 |

* Exact percentage is a trade secret. Concentration range is provided to assist users in providing appropriate protections.

Exposure to moisture during cure will release 1-5% acetic acid.

## 4. FIRST AID MEASURES

**Inhalation:** Move to fresh air. If symptoms develop and persist, get medical attention.

**Skin contact:** Wipe off paste with paper towel or cloth. Wash with soap and water. If skin irritation persists, call a physician.

**Eye contact:** Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If adverse health effects develop seek medical attention.

**Ingestion:** Do not induce vomiting. In case of adverse health effects seek medical advice.

**Symptoms:** See Section 11.

## 5. FIRE FIGHTING MEASURES

**Extinguishing media:** Foam, dry chemical or carbon dioxide.

**Special firefighting procedures:** Wear self-contained breathing apparatus and full protective clothing, such as turn-out gear.

**Unusual fire or explosion hazards:** Closed containers may rupture (due to build up of pressure) when exposed to extreme heat.

**Hazardous combustion products:** Silica mist. Acrid smoke and fumes. Formaldehyde.

## 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:** Do not allow product to enter sewer or waterways.

**Clean-up methods:** Store in a partly filled, closed container until disposal. Spilled material will solidify. Scrape up as much material as possible. Maintain good ventilation for large spills.

## 7. HANDLING AND STORAGE

**Handling:** Do not get in eyes. Avoid contact with eyes, skin and clothing. Do not get on skin or clothing. Do not handle contact lenses until all sealant has been removed from hands. Residual sealant may transfer to lenses and cause eye irritation.

**Storage:** Keep container closed. Store in a dry area below 90° F.

## 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 |
|---|---|---|---|---|
| Distillates (petroleum), hydrotreated middle | 5 mg/m3 TWA Inhalable fraction. | 5 mg/m3 PEL Mist. | None | None |
| Silicon dioxide | 6 mg/m3 TWA | 20 MPPCF TWA 0.8 mg/m3 TWA | None | 3 mg/m3 TWA Respirable fraction. |
| Silicone Resin | None | None | None | None |
| Substituted Silane | None | None | None | None |
| Substituted Silane | None | None | None | None |
| Carbon black | 3 mg/m3 TWA Inhalable fraction. | 3.5 mg/m3 PEL | None | None |

**Engineering controls:** Ensure adequate ventilation, especially in confined areas.

**Respiratory protection:** No personal respiratory protective equipment normally required. Use NIOSH approved respirator if there is potential to exceed exposure limit(s).

**Eye/face protection:** Safety goggles or safety glasses with side shields.

**Skin protection:** Use impermeable gloves and protective clothing as necessary to prevent skin contact.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Physical state:** Paste
**Color:** Black
**Odor:** Acetic acid
**Odor threshold:** Not available.
**pH:** Not determined
**Vapor pressure:** < 10 mm hg (68 °F (20°C))
**Boiling point/range:** Not available.
**Melting point/ range:** Not available.
**Specific gravity:** 1.01 at 20 °C (68°F)
**Vapor density:** Heavier than air.
**Flash point:** > 93 °C (> 199.4 °F)
**Flammable/Explosive limits - lower:** 4 % (acetic acid)
**Flammable/Explosive limits - upper:** 19.9 % (acetic acid)
**Autoignition temperature:** Not available.
**Flammability**: Not applicable
**Evaporation rate:** Not available.
**Solubility in water:** Not soluble. Polymerizes in presence of water.
**Partition coefficient (n-octanol/water):** Not available.
**VOC content:** < 3 %; 30 g/l
**Viscosity:** Not available.
**Decomposition temperature:** Not available.

## 10. STABILITY AND REACTIVITY

**Stability:** Stable at normal conditions.

**Hazardous reactions:** None under normal processing.

**Hazardous decomposition products:** Acetic acid is liberated slowly upon contact with moisture. Formaldehyde.

**Incompatible materials:** Bases. Acids. Oxidizing agents. Water

**Reactivity:** Not available.

**Conditions to avoid:** Exposure to moisture. Prolonged heating at temperatures above 150 °C.

## 11. TOXICOLOGICAL INFORMATION

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

**Potential Health Effects/Symptoms**

**Inhalation:** When heated to temperatures exceeding 300° F (150° C) in the presence of air, silicones may form formaldehyde vapors. Formaldehyde is a potential cancer hazard and a known skin and respiratory sensitizer. Vapors irritate the eyes, nose and throat. Safe handling conditions may be maintained by keeping formaldehyde vapor concentrations below the OSHA permissible limit. Acetic acid produced during cure may irritate eyes, nose and throat.

**Skin contact:** Causes skin irritation.

**Eye contact:** This product is severely irritating to the eyes and may cause irreversible damage including burns and blindness.

**Ingestion:** Not expected under normal conditions of use. May cause gastrointestinal tract irritation if swallowed.

| Hazardous Component(s) | LD50s and LC50s | Immediate and Delayed Health Effects |
|---|---|---|
| Distillates (petroleum), hydrotreated middle | None | Irritant |
| Silicon dioxide | Oral LD50 (Rat) = > 22,500 mg/kg<br>Oral LD50 (Mouse) = > 15,000 mg/kg | Nuisance dust |
| Silicone Resin | None | Irritant |
| Substituted Silane | None | Irritant, Allergen |
| Substituted Silane | None | No Target Organs |
| Carbon black | Oral LD50 (Rat) = > 8,000 mg/kg | Respiratory, Some evidence of carcinogenicity |

| Hazardous Component(s) | NTP Carcinogen | IARC Carcinogen | OSHA Carcinogen (Specifically Regulated) |
|---|---|---|---|
| Distillates (petroleum), hydrotreated middle | No | No | No |
| Silicon dioxide | No | No | No |
| Silicone Resin | No | No | No |
| Substituted Silane | No | No | No |
| Substituted Silane | No | No | No |
| Carbon black | No | Group 2B | 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. Cured rubber can be incinerated or landfilled following EPA and local regulations.

**Hazardous waste number:** Not a RCRA hazardous waste.

## 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:** Not regulated
**Hazard class or division:** None
**Identification number:** None
**Packing group:** None

**International Air Transportation (ICAO/IATA)**

**Proper shipping name:** Not regulated
**Hazard class or division:** None
**Identification number:** None
**Packing group:** None

**Water Transportation (IMO/IMDG)**

**Proper shipping name:** Not regulated
**Hazard class or division:** None
**Identification number:** None
**Packing group:** None

## 15. REGULATORY INFORMATION

**United States Regulatory Information**

**TSCA 8 (b) Inventory Status:** All components are listed or are exempt from listing on the Toxic Substances Control Act Inventory.
**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
**CERCLA/SARA Section 313:** None above reporting de minimis.

**California Proposition 65:** This product contains a chemical known in the State of California to cause cancer.

**Canada Regulatory Information**

**CEPA DSL/NDSL Status:** All components are listed on or are exempt from listing on the Canadian Domestic Substances List.

## 16. OTHER INFORMATION

**This safety data sheet contains changes from the previous version in sections:** New Safety Data Sheet format.

**Prepared by:** Regulatory Affairs

**Issue date:** 08/29/2016