# Material Safety Data Sheet

**Revision Number:** 002.1

**Issue date:** 10/20/2009

## 1. PRODUCT AND COMPANY IDENTIFICATION

**Product name:** **LOCTITE 5604 SIL BLK PTB 400ML**
**Product type:** Silicone Sealant

**IDH number:** 1138255
**Item number:** 1138258_198231
**Region:** United States

**Company address:**
Henkel Corporation
One Henkel Way
Rocky Hill, Connecticut 06067

**Contact information:**
Telephone: 860.571.5100
Emergency telephone: 860.571.5100
Internet: www.henkelna.com

## 2. HAZARDS IDENTIFICATION

**EMERGENCY OVERVIEW**

**HMIS:**

**Physical state:** Paste
**Color:** White
**Odor:** Slight, Alcoholic

**HEALTH:** *2
**FLAMMABILITY:** 1
**PHYSICAL HAZARD:** 0
**Personal Protection:** See MSDS Section 8

WARNING: REPEATED OR PROLONGED CONTACT MAY CAUSE ALLERGIC SKIN REACTION.
PROLONGED OR REPEATED CONTACT WITH UNCURED SEALANT MAY CAUSE BURNS TO SKIN AND EYES.
MAY CAUSE EYE, SKIN AND RESPIRATORY TRACT IRRITATION.

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

**Potential Health Effects**

**Inhalation:** May cause respiratory tract irritation. Overexposure to methanol formed during cure may cause drowsiness, nausea, and vomiting. 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.

**Skin contact:** May cause allergic skin reaction. Repeated or prolonged exposure may cause skin burns. Prolonged or repeated contact may cause irritation.

**Eye contact:** Vapors may irritate eyes. Contact with eyes will cause irritation. Prolonged or repeated contact may worsen irritation. May cause eye injury.

**Ingestion:** Not expected under normal conditions of use. Not expected to be harmful by ingestion.

**Existing conditions aggravated by exposure:** None known

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

**See Section 11 for additional toxicological information.**

## 3. COMPOSITION / INFORMATION ON INGREDIENTS

| Hazardous components | CAS NUMBER | % |
|---|---|---|
| Limestone | 1317-65-3 | 60 - 100 |
| Dimethyl polysiloxane | 63148-62-9 | 10 - 30 |
| Trimethoxyvinylsilane | 2768-02-7 | 1 - 5 |
| 3-(Trimethoxysilyl)propylamine | 13822-56-5 | 1 - 5 |
| Octadecanoic acid | 57-11-4 | 1 - 5 |
| Quartz (SiO2) | 14808-60-7 | 0.1 - 1 |

## 4. FIRST AID MEASURES

**Inhalation:** Move to fresh air in case of accidental inhalation of vapours or decomposition products. 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:** In case of contact with the eyes, rinse immediately with plenty of water for 15 minutes, and seek immediate medical attention.

**Ingestion:** Do not induce vomiting. If symptoms develop and persist, get medical attention.

## 5. FIRE FIGHTING MEASURES

**Flash point:** > 93.33 °C (> 199.99 °F)

**Autoignition temperature:** Not applicable

**Flammable/Explosive limits - lower:** Not applicable

**Flammable/Explosive limits - upper:** Not applicable

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

**Special firefighting procedures:** Prevent inhalation of fumes and gases.

**Unusual fire or explosion hazards:** None

**Hazardous combustion products:** Irritating organic vapours. Formaldehyde. Oxides of silicon. Oxides of carbon.

## 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 material to contaminate ground water system.

**Clean-up methods:** Scrape up as much material as possible. Maintain good ventilation for large spills. Place scrap material in a well ventilated area and allow to cure to rubber.

## 7. HANDLING AND STORAGE

**Handling:** Do not handle contact lenses until all sealant has been removed from hands. Residual sealant may transfer to lenses and cause eye irritation. Prevent contact with eyes, skin and clothing. Do not breathe vapor and mist. Wash thoroughly after handling.

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

**For information on product shelf life contact Henkel Customer Service at (800) 243-4874.**

## 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 components | ACGIH TLV | OSHA PEL | AIHA WEEL | OTHER |
|---|---|---|---|---|
| Limestone | 10 mg/m3 TWA Total dust. | 5 mg/m3 TWA Respirable fraction. 15 mg/m3 TWA Total dust. | None | None |
| Dimethyl polysiloxane | None | None | None | None |
| Trimethoxyvinylsilane | None | None | None | None |
| 3-(Trimethoxysilyl)propylamine | None | None | None | None |
| Octadecanoic acid | 10 mg/m3 TWA | None | None | None |
| Quartz (SiO2) | 0.025 mg/m3 TWA Respirable fraction. | 2.4 MPPCF TWA Respirable. 0.1 mg/m3 TWA Respirable. 0.3 mg/m3 TWA Total dust. | None | None |

**Engineering controls:** Work should be done in an adequately ventilated area (i.e., ventilation sufficient to maintain concentrations below one half of the PEL and other relevant standards).

**Respiratory protection:** Breathing apparatus only if aerosol or dust is formed.

**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:** White
**Odor:** Slight, Alcoholic
**Odor threshold:** Not available
**pH:** Not applicable
**Vapor pressure:** Not available
**Boiling point/range:** Not applicable
**Melting point/ range:** Not available
**Specific gravity:** 1.1 at 20 °C (68°F)
**Vapor density:** Not available
**Flash point:** > 93.33 °C (> 199.99 °F)
**Flammable/Explosive limits - lower:** Not applicable
**Flammable/Explosive limits - upper:** Not applicable
**Autoignition temperature:** Not applicable
**Evaporation rate:** Not available
**Solubility in water:** Polymerises in presence of water.
**Partition coefficient (n-octanol/water):** Not available
**VOC content:** 0.84 %; 9.2 g/l

## 10. STABILITY AND REACTIVITY

**Stability**: Stable

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

**Hazardous decomposition products:** Oxides of silicon. Formaldehyde. Irritating fumes. Oxides of carbon.

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

**Conditions to avoid:** Exposure to moisture.

## 11. TOXICOLOGICAL INFORMATION

| Hazardous components | NTP Carcinogen | IARC Carcinogen | OSHA Carcinogen (Specifically Regulated) |
|---|---|---|---|
| Limestone | No | No | No |
| Dimethyl polysiloxane | No | No | No |
| Trimethoxyvinylsilane | No | No | No |
| 3-(Trimethoxysilyl)propylamine | No | No | No |
| Octadecanoic acid | No | No | No |
| Quartz (SiO2) | Known carcinogen. | Group 1 | No |

| Hazardous components | Health Effects/Target Organs |
|---|---|
| Limestone | Nuisance dust |
| Dimethyl polysiloxane | Irritant |
| Trimethoxyvinylsilane | Irritant, Allergen |
| 3-(Trimethoxysilyl)propylamine | Irritant, Allergen |
| Octadecanoic acid | Irritant |
| Quartz (SiO2) | Immune system, Lung, Some evidence of carcinogenicity |

## 12. ECOLOGICAL INFORMATION

**Ecological information:** No specific studies have been conducted by Henkel on the ecotoxicity or environmental fate of this material; however, commonly available data on the material indicate that uncontrolled releases to soil, ground water, or surface waters could entail acute and/or chronic ecological effects, depending on the quantity and concentration of such releases. Releases of volatile components to the atmosphere are not believed to entail significant ecological consequences provided such releases are within the exposure levels set forth in this document. Accordingly, all appropriate measures should be taken to avoid uncontrolled releases to the environment, and any spills or other uncontrolled releases which may occur should be contained and cleaned up immediately in accordance with Section 6.

## 13. DISPOSAL CONSIDERATIONS

**Information provided is for unused product only.**

**Recommended method of disposal:** Cured rubber can be incinerated or landfilled following EPA and local regulations.

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

## 14. TRANSPORT INFORMATION

**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 |
| **Exceptions:** | 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 minimus |
| **CERCLA/SARA Section 302 EHS:** | None above reporting de minimus |
| **CERCLA/SARA Section 311/312:** | Immediate Health, Delayed Health |
| **CERCLA/SARA 313:** | None above reporting de minimus |
| **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. |
| **WHMIS hazard class:** | D.2.A, D.2.B |

## 16. OTHER INFORMATION

**This material safety data sheet contains changes from the previous version in sections:** Not available

**Prepared by:** Lou Fabrizio, Regulatory Affairs Specialist

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