**Revision Number:** 005.1

**Issue date:** 12/04/2008

## 1. PRODUCT AND COMPANY IDENTIFICATION

**Product name:** Loctite(R) 5920 Flange Sealant Copper High Performance RTV Silicone Gasket Maker

**IDH number:** 231133

**Product type:** Silicone

**Item number:** 21472

**Region:** United States

**Company address:**
Henkel Corporation
1001 Trout Brook Crossing
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 | **HEALTH:** | *2 |
| **Color:** | Copper | **FLAMMABILITY:** | 1 |
| **Odor:** | Mild | **PHYSICAL HAZARD:** | 0 |
| | | **Personal Protection:** | See MSDS Section 8 |

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

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

**Potential Health Effects**

**Inhalation:** Inhalation of vapors or mists of the product may be irritating to the respiratory system. 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. The silane is a skin and eye irritant and prolonged contact may cause eye and skin burns. The low concentration makes such overexposure unlikely and minimizes its affect on health and safety.

**Skin contact:** Brief contact with the uncured adhesive may irritate the skin or cause a rash. Repeated or prolonged contact may cause burns.

**Eye contact:** Vapors may irritate eyes. Contact with eyes will cause irritation. Repeated or prolonged contact may cause burns.

**Ingestion:** May be harmful if swallowed. Not expected under normal conditions of use.

**Existing conditions aggravated by exposure:** Skin disorders.

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 | % |
|---|---|---|
| Silicone Resin | Proprietary | 30 - 60 |
| Silicone Resin | Proprietary | 10 - 30 |
| Filler | Proprietary | 5 - 10 |
| Oximino silane | Proprietary | 5 - 10 |
| Diiron trioxide | 1309-37-1 | 1 - 5 |
| Mica | 12001-26-2 | 1 - 5 |
| Butanone oxime | 96-29-7 | 1 - 5 |

Methyl ethyl ketoxime (MEKO) is formed during cure. This product will release up to 5% MEKO. Exposure to moisture during cure will release 1-2% methanol.

## 4. FIRST AID MEASURES

**Inhalation:** Move to fresh air. If symptoms persist, seek medical advice.

**Skin contact:** Wipe off paste with paper towel or cloth. Wash with soap and water.

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

**Ingestion:** Do not induce vomiting. Keep individual calm. Get medical attention.

## 5. FIRE FIGHTING MEASURES

**Flash point:** > 93 °C (> 199.4 °F) Tagliabue closed cup

**Autoignition temperature:** Not available

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

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

**Extinguishing media:** Carbon dioxide. Foam. Dry chemical.

**Special firefighting procedures:** Wear self contained breathing apparatus.

**Unusual fire or explosion hazards:** None

**Hazardous combustion products:** Oxides of carbon. Oxides of silicon. 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:** Scrape up as much material as possible. Maintain good ventilation for large spills. Store in a partly filled, closed container until disposal.

## 7. HANDLING AND STORAGE

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

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

**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 |
|---|---|---|---|---|
| Silicone Resin | None | None | None | None |
| Silicone Resin | None | None | None | None |
| Filler | None | None | None | None |
| Oximino silane | None | None | None | None |
| Diiron trioxide | 5 mg/m3 TWA Respirable fraction. | 10 mg/m3 TWA Fume. | None | None |
| Mica | 3 mg/m3 TWA Respirable fraction. | 20 MPPCF TWA | None | None |
| Butanone oxime | None | None | 10 ppm (36 mg/m3) TWA (Skin sensitizer) | None |

**Engineering controls:** Provide adequate local exhaust ventilation to maintain worker exposure below exposure limits.

**Respiratory protection:** Use a NIOSH approved air-purifying respirator if the potential to exceed established exposure limits exists.

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

**Skin protection:** Chemical resistant, impermeable gloves. Impervious clothing.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Physical state:** Paste
**Color:** Copper
**Odor:** Mild
**Odor threshold:** Not available
**pH:** Not applicable
**Vapor pressure:** < 5 mm Hg (20 °C (68°F))
**Boiling point/range:** Not applicable
**Melting point/ range:** Not available
**Specific gravity:** 1.31 at 20 °C (68°F)
**Vapor density:** Heavier than air.
**Flash point:** > 93 °C (> 199.4 °F) Tagliabue closed cup
**Flammable/Explosive limits - lower:** Not applicable
**Flammable/Explosive limits - upper:** Not applicable
**Autoignition temperature:** Not available
**Evaporation rate:** Not available
**Solubility in water:** Polymerises in presence of water.
**Partition coefficient (n-octanol/water):** Not available
**VOC content:** 3.5 %; 45.85 g/l

## 10. STABILITY AND REACTIVITY

**Stability**: Stable

**Hazardous reactions:** Will not occur.

**Hazardous decomposition products:** Methyl ethyl ketoxime formed during cure. Oxides of carbon. Oxides of silicon. Formaldehyde.

**Incompatible materials:** Polymerizes on contact with water. Oxidizing agents. Acids and bases.

**Conditions to avoid:** Moisture.

## 11. TOXICOLOGICAL INFORMATION

| Hazardous components | NTP Carcinogen | IARC Carcinogen | OSHA Carcinogen (Specifically Regulated) |
|---|---|---|---|
| Silicone Resin | No | No | No |
| Silicone Resin | No | No | No |
| Filler | No | No | No |
| Oximino silane | No | No | No |
| Diiron trioxide | No | No | No |
| Mica | No | No | No |
| Butanone oxime | No | No | No |

| Hazardous components | Health Effects/Target Organs |
|---|---|
| Silicone Resin | No Target Organs |
| Silicone Resin | Irritant |
| Filler | No Target Organs |
| Oximino silane | Irritant, Allergen |
| Diiron trioxide | Allergen, Cardiac, Central nervous system, Irritant, Kidney, Liver, Lung |
| Mica | Lung |
| Butanone oxime | Allergen, Blood, Central nervous system, Eyes, Irritant, 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:** 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.
**WHMIS hazard class:** D.2.B, D.2.A

## 16. OTHER INFORMATION

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

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

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