



Technologies

**Revision Date:** 06/23/2003

Print date:

Item number:

Region:

06/23/2003

21746

**United States** 

#### 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product name:5910 Flange SealantProduct type:Silicone SealantCompany address:Henkel Loctite Corporation

Henkel Loctite Corporation 1001 Trout Brook Crossing Rocky Hill, Connecticut 06067 Telephone: (860) 571-5100 Emergency telephone: (860) 571-5100

# 2. COMPOSITION/INFORMATION ON INGREDIENTS

| Hazardous components<br>Calcium carbonate<br>471-34-1 | <u>%</u><br>30-60 | ACGIH TLV<br>10 mg/m <sup>3</sup> TWA<br>(particulate matter<br>containing no asbestos 5<br>and <1% crystalline silica) | OSHA PEL<br>15 mg/m³ TWA (total<br>dust)<br>5 mg/m³ TWA (respirable<br>fraction) | OTHER<br>None |
|---|-------------------|---|--|---------------|
| Vinyl oximino silane<br>2224-33-1                     | 1-5               | None  | None   | None          |
| Carbon black<br>1333-86-4                             | 1-5               | 3.5 mg/m³ TWA   | 3.5 mg/m³ TWA  | None          |
| Methyl ethyl ketoxime<br>96-29-7                      | 0.1-1             | None  | None   | None          |
| Methanol<br>67-56-1                                   | 0-0.1             | 200 ppm TWA<br>250 ppm STEL<br>(skin)   | 200 ppm TWA<br>260 mg/m³ TWA   | None          |

Exposure to moisture during cure wll release 3-5% methyl alcohol. Methyl ethyl ketoxime(MEKO) is formed during cure. This product will release up to 5% MEKO.

## **3. HAZARDS IDENTIFICATION**

|                 |       | EMERGENCY OVERVIEW<br>HMIS:                       |               |
|-----------------|-------|---|---------------|
| Physical state: | Paste | HEALTH:   | 1             |
| Color:          | Black | FLAMMABILITY:                                     | 1             |
| Odor:           | Mild  | PHYSICAL HAZARD:                                  | 0             |
|                 |       | Personal Protection:                              | See Section 8 |
| CAUTION         | I:    | CAUSES EYE, SKIN AND RESPIRATORY TRACT IRRITATION |               |

Relevant routes of exposure:

Skin, inhalation, eyes, Ingestion

Potential Health Effects

Inhalation:Vapors and mist irritate the respiratory tract and nasal passages. When heated to temeraptures<br/>exceeding 300° F (150° C) in the presence of air, silicones may form formaldehyde vapors.<br/>Formaldehyde is a potential cancer hazard and a known skin and respiratory sensitizer. Vapors irritate<br/>the eyes, nose and throat. Safe handling conditions may be maintained by keeping formaldehyde<br/>vapor concentrations below the OSHA permissible limt. The silane is a skin and eye irritant and may<br/>cause skin burns. Overexposure may cause coma and respiratory failure. The low concentration<br/>makes such overexposure unlikely and minimizes its affect on health and safety.Skin contact:May cause skin irritation with discomfort or rash.Eye contact:Vapors may irritate eyes. Contact with eyes will cause irritation.<br/>Moderately toxic by ingestion. Not expected under normal conditions of use.

Existing conditions aggravated by exposure:

Skin disorders.

See Section 11 for additional toxicological information.

#### **4. FIRST AID MEASURES**

| Inhalation:   | Remove to fresh air. If discomfort persists seek medical attention.   |
|---------------|---|
| 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. Obtain medical attention.   |

# **5. FIRE-FIGHTING MEASURES**

| Flash point:                        | Greater than 93°C (200°F) Tagliabue closed cup            |
|-------------------------------------|---|
| Autoignition temperature:           | Not available   |
| Flammable/Explosive limits-lower %: | Not applicable  |
| Flammable/Explosive limits-upper %: | Not applicable  |
| Extinguishing media:                | Carbon dioxide (CO2). Foam. Dry chemical.                 |
| Special fire fighting procedures:   | None  |
| Unusual fire or explosion hazards:  | None  |
| Hazardous combustion products:      | Formaldehyde. Silica fume.                                |
|                                     | 6. ACCIDENTAL RELEASE MEASURES                            |
| Environmental precautions:          | Do not flush into surface water or sanitary sewer 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:

Avoid contact with eyes, skin and clothing. Avoid breathing vapor and mist. Wash thoroughly after handling. Do not wear contact lenses.

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

# Incompatible products: Never allow product to get in contact with water during storage.

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

# 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

| Engineering controls:   | Use local exhaust ventilation to maintain airborne concentrations below established exposure limits.         |
|-------------------------|--|
| Respiratory protection: | Use a NIOSH approved air-purifying respirator if the potential to exceed established exposure limits exists. |
| Skin protection:        | Chemical resistant, impermeable gloves. Impervious clothing  |
| Eye/face protection:    | Safety goggles or safety glasses with side shields.  |

See Section 2 for exposure limits.

# 9. PHYSICAL AND CHEMICAL PROPERTIES

| Physical state:<br>Color:                | Paste<br>Black                   |
|--|----------------------------------|
| Odor:                                    | Mild                             |
| Vapor pressure:                          | <5 mmHg @20°C (68° F)            |
| pH:                                      | Not applicable                   |
| Boiling point/range:                     | Not applicable                   |
| Melting point/range:                     | Not available                    |
| Specific gravity:                        | 1.34 at 20 deg. C                |
| Vapor density:                           | Heavier than air                 |
| Evaporation rate:                        | Not available                    |
| Solubility in water:                     | Polymerizes in presence of water |
| Partition coefficient (n-octanol/water): | Not available                    |
| VOC content:                             | 4.01%; 53.7 grams/liter          |

#### **10. STABILITY AND REACTIVITY**

| Stability:                        | Stable.                                  |
|-----------------------------------|--|
| Hazardous polymerization:         | Will not occur.                          |
| Hazardous decomposition products: | Methyl ethyl ketoxime formed during cure |
| Incompatability:                  | Polymerizes on contact with water        |
| Conditions to avoid:              | Moisture.                                |

# 11. TOXICOLOGICAL INFORMATION

Carcinogen Status

| Hazardous components  | NTP Carcinogen | IARC Carcinogen | OSHA Carcinogen |
|-----------------------|----------------|-----------------|-----------------|
| Calcium carbonate     | No             | No              | No              |
| Vinyl oximino silane  | No             | No              | No              |
| Carbon black          | No             | Group 2B        | No              |
| Methyl ethyl ketoxime | No             | No              | No              |
| Methanol              | No             | No              | No              |

#### Literature Referenced Target Organ & Other Health Effects

| Hazardous components  | Health Effects/Target Organs  |
|-----------------------|---|
| Calcium carbonate     | Nuisance dust   |
| Vinyl oximino silane  | Allergen, Irritant  |
| Carbon black          | Respiratory, Some evidence of carcinogenicity   |
| Methyl ethyl ketoxime | Allergen, Blood, Central nervous system, Eyes, Irritant, Some evidence of carcinogenicity |
| Methanol              | Eyes, Heart, Irritant, Kidney, Liver, Metabolic, Nervous System, Reproductive             |

# 12. ECOLOGICAL INFORMATION

Ecological information:

No specific studies have been conducted by Loctite on the ecotoxicity or environmental fate of this material; however, commonly available data on the material indicate that uncontrolled releases to soil, groundwater, 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. |
| EPA hazardous waste number:     | Not a RCRA hazardous waste.  |

## **14. TRANSPORT INFORMATION**

| U.S. DOT 49 CFR:          |              |
|---------------------------|--------------|
| Proper shipping name:     | Unrestricted |
| Hazard class or division: | None         |
| Identification number:    | None         |
| Packing group:            | None         |
|                           |              |

| International Air Transportation | ICAO/IATA): |
|----------------------------------|-------------|
|                                  |             |

| Proper shipping name:     | Unrestricted |
|---------------------------|--------------|
| Hazard class or division: | None         |
| Identification number:    | None         |
| Packing group:            | None         |
|                           |              |

# WaterTransportation (IMO/IMDG):

| Proper shipping name:     | Unrestricted |
|---------------------------|--------------|
| Hazard class or division: | None         |
| Identification number:    | None         |
| Packing group:            | None         |
| Exceptions:               | None         |
| Marine pollutant:         | None         |
|                           |              |

## **15. REGULATORY INFORMATION**

#### United States Regulatory Information

| TSCA 8 (b) Inventory Status:<br>TSCA 12 (b) Export Notification:                 | All components are listed or are exempt from listing on the Toxic Substances Control Act Inventory. None. Methyl ethyl ketoxime (CAS# 96-29-7).               |  |
|--|---|--|
| CERCLA/SARA Section 302 EHS:<br>CERCLA/SARA Section 311/312:<br>CERCLA/SARA 313: | None.<br>None.<br>None.   |  |
| California Proposition 65:   | This product contains a chemical known to the State of California to cause cancer, birth defects or other reproductive harm. Toluene (CAS# 108-88-3). <1 ppm. |  |
| Canada Regulatory Information  |   |  |
| CEPA DSL/NDSL Status:<br>WHMIS hazard class:                                     | All components are listed on or are exempt from listing on the Domestic Substances List. D.2.B, D.2.A   |  |
| 16. OTHER INFORMATION  |   |  |

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

#### Prepared by:

Lou Fabrizio, Senior Health & Regulatory Affairs Specialist

DISCLAIMER: The data contained herein are furnished for information only and are believed to be reliable. However, Henkel Loctite Corporation does not assume responsibility for any results obtained by persons over whose methods Henkel Loctite Corporation has no control. It is the user's responsibility to determine the suitability of Henkel Loctite's products or any production methods mentioned herein for a particular purpose, and to adopt such precautions as may be advisable for the protection of property and persons against any hazards that may be involved in the handling and use of any of Henkel Loctite Corporation's products. In light of the foregoing, Henkel Loctite Corporation specifically disclaims all warranties, express or implied, including warranties of merchantability and fitness for a particular purpose, arising from sale or use of Henkel Loctite Corporation's products. Henkel Loctite Corporation further disclaims any liability for consequential or incidental damages of any kind, including lost profits.