

Revision Date: 11/02/2006

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1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

| | | | |
|-------------------------|--|-----------------------------|---|
| Product name: | Loctite(R) RTV 598 Black Silicone High Performance Gasket Maker | Item No. : | 37519 / IDH No. 495075 |
| Product type: | Silicone | 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.loctite.com |

2. COMPOSITION/INFORMATION ON INGREDIENTS

| <u>Hazardous components</u> | <u>%</u> | <u>ACGIH TLV</u> | <u>OSHA PEL</u> | <u>OTHER</u> |
|-----------------------------------|----------|--|---|--|
| Calcium carbonate 1317-65-3 | 30-60 | 10 mg/m ³ TWA (particulate matter containing no asbestos and <1% crystalline silica) | 15 mg/m ³ TWA total dust 5 mg/m ³ TWA respirable fraction | None |
| Vinyl oximino silane 2224-33-1 | 1-5 | None | None | None |
| Propane 74-98-6 | 1-5 | 1000 ppm TWA | 1000 ppm TWA 1800 mg/m ³ TWA | None |
| Isobutane 75-28-5 | 1-5 | 1000 ppm TWA | None | None |
| Carbon black 1333-86-4 | 0.1-1 | 3.5 mg/m ³ TWA | 3.5 mg/m ³ TWA | None |
| Methyl ethyl ketoxime 96-29-7 | 0.1-1 | None | None | 10 ppm, dermal sensitizer TWA, (WEEL) |
| Silica, quartz 14808-60-7 | 0-0.1 | 0.025 mg/m ³ TWA respirable fraction | 0.1mg/m ³ TWA (respirable) | None |

Non hazardous components

Silicone Resins 30-50%

Exposure to moisture during cure will release 0.1 - 0.9% methyl alcohol. Methyl ethyl ketoxime(MEKO) is formed during cure. This product will release up to 5% MEKO.

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

| | | | |
|------------------------|-------|-----------------------------|---------------|
| Physical state: | Paste | HEALTH: | 1 |
| Color: | Black | FLAMMABILITY: | 4 |
| Odor: | Mild | PHYSICAL HAZARD: | 0 |
| | | Personal Protection: | See Section 8 |

WARNING: VAPOR MAY CAUSE FLASH FIRE
MAY CAUSE EYE, SKIN AND RESPIRATORY TRACT IRRITATION.

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

Potential Health Effects

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| | |
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| Inhalation: | Vapors and mists will irritate the respiratory tract and nasal passages. 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 may cause skin burns. Overexposure may cause coma and respiratory failure. The low concentration 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. |
| Ingestion: | 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

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| 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

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| Flash point: | (Base only) Greater than 93°C (200°F) Tagliabue closed cup |
| Flashback: | This product exhibits flashback when tested for flame extension. |
| Flame Projection: | Greater than 46 cms (18 inches) |
| Autoignition temperature: | Not available |
| Flammable/Explosive limits-lower %: | 0.9 (value for propellant). |
| Flammable/Explosive limits-upper %: | 10 (value for propellant). |
| Extinguishing media: | Carbon dioxide (CO2). Dry chemical. Foam. Water spray. |
| Special fire fighting procedures: | Wear self-contained breathing apparatus and full protective clothing, such as turn-out gear. Water spray may be ineffective. Water should be used to cool closed containers to prevent pressure build-up and possible autoignition or explosion when exposed to extreme heat. |
| Unusual fire or explosion hazards: | Isolate from heat, electrical equipment, sparks, and open flame. Closed containers may explode when exposed to extreme heat. |
| Hazardous combustion products: | Acrid smoke and fumes. Formaldehyde. Irritating organic vapors. |

6. ACCIDENTAL RELEASE MEASURES

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| 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. Store in a partly filled, closed container until disposal. |

7. HANDLING AND STORAGE

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| 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 Customer Service at (800) 243-4874.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

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| 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: | Paste |
| Color: | 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: | 1.3 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: | 3.65%; 47.4 grams/liter |

10. STABILITY AND REACTIVITY

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

11. TOXICOLOGICAL INFORMATION

Carcinogen Status

| Hazardous components | NTP Carcinogen | IARC Carcinogen | OSHA Carcinogen |
|-----------------------------------|------------------|-----------------|-----------------|
| Calcium carbonate 1317-65-3 | No | No | No |
| Vinyl oximino silane 2224-33-1 | No | No | No |
| Propane 74-98-6 | No | No | No |
| Isobutane 75-28-5 | No | No | No |
| Carbon black 1333-86-4 | No | Group 2B | Yes |
| Methyl ethyl ketoxime 96-29-7 | No | No | No |
| Silica, quartz 14808-60-7 | Known Carcinogen | Group 1 | Yes |

Literature Referenced Target Organ & Other Health Effects

| Hazardous components | Health Effects/Target Organs |
|-----------------------------------|---|
| Calcium carbonate 1317-65-3 | Nuisance dust |
| Vinyl oximino silane 2224-33-1 | Allergen, Irritant |
| Propane 74-98-6 | Cardiac, Central nervous system, Irritant |
| Isobutane 75-28-5 | Cardiac, Central nervous system, Lung |
| Carbon black 1333-86-4 | Respiratory, Some evidence of carcinogenicity |
| Methyl ethyl ketoxime 96-29-7 | Allergen, Blood, Central nervous system, Eyes, Irritant, Some evidence of carcinogenicity |
| Silica, quartz 14808-60-7 | Some evidence of carcinogenicity, Lung, Immune system |

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, 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

The shipping classifications in this section are for non-bulk packaging only (unless otherwise specified). Shipping classification may be different for bulk packaging.

U.S. Department of Transportation Ground (49 CFR):

Proper shipping name: Aerosols, flammable
Hazard class or division: 2.1
Identification number: UN 1950
Packing group: None
Marine pollutant: None

International Air Transportation (ICAO/IATA):

Proper shipping name: Aerosols, flammable
Hazard class or division: 2.1
Identification number: UN1950

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Product name: Loctite(R) RTV 598 Black Silicone High Performance Gasket Maker

Packing group: None
Exceptions: May Qualify as Consumer Commodity ID8000

WaterTransportation (IMO/IMDG):

Proper shipping name: Aerosols, flammable
Hazard class or division: 2.1
Identification number: UN1950
Packing group: None
Exceptions: None
Marine pollutant: 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.

CERCLA/SARA Section 302 EHS: None.
CERCLA/SARA Section 311/312: None.
CERCLA/SARA 313: None.

California Proposition 65: This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm.

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.
WHMIS hazard class: D.2.B

16. OTHER INFORMATION

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

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