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### 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

<b>Product name:</b>	Loctite(R) Nuva-Sil(R) 5091 Self-Leveling UV Silicone Potting Compound	<b>Item No. :</b>	17412 / IDH No. 135257
<b>Product type:</b>	Silicone	<b>Region:</b>	United States
<b>Company address:</b>	Henkel Corporation One Henkel Way Rocky Hill, Connecticut 06067	<b>Contact Information:</b>	Telephone: (860) 571-5100 Emergency telephone: (860) 571-5100 Internet: www.henkelna.com

### 2. COMPOSITION/INFORMATION ON INGREDIENTS

<u>Hazardous components</u>	<u>%</u>	<u>ACGIH TLV</u>	<u>OSHA PEL</u>	<u>OTHER</u>
Silicone Resin Proprietary	60-100	None	None	None
Silicone Resin Proprietary	5-10	None	None	None
Treated fumed silica 67762-90-7	1-5	10mg/m <sup>3</sup> Inhalable fraction, 3mg/m <sup>3</sup> Respirable fraction, TWA	5mg/m <sup>3</sup> Respirable dust, 15mg/m <sup>3</sup> Total dust	None
Silane Derivative Proprietary	1-5	None	None	None
Photoinitiator Proprietary	1-5	None	None	None
Dibutoxydiacetoxysilane 13170-23-5	1-5	None	None	None

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

### 3. HAZARDS IDENTIFICATION

#### EMERGENCY OVERVIEW

**Physical state:** Viscous liquid  
**Color:** Opaque  
**Odor:** Acetic Acid

#### HMIS:

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

**CAUTION:** PROLONGED OR REPEATED CONTACT WITH UNCURED SEALANT MAY CAUSE EYE, SKIN AND RESPIRATORY TRACT IRRITATION.  
REPEATED OR PROLONGED CONTACT MAY CAUSE ALLERGIC SKIN REACTION.

**Relevant routes of exposure:** Skin contact, Eye contact, Inhalation, Ingestion

#### Potential Health Effects

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<b>Inhalation:</b>	Acetic acid produced during cure may irritate eyes, nose and throat. 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.
<b>Skin contact:</b>	Prolonged or repeated contact with uncured sealant may cause skin irritation.
<b>Eye contact:</b>	Uncured product irritates the eyes.
<b>Ingestion:</b>	Not a relevant route of exposure. Not expected to be harmful by ingestion.

**Existing conditions aggravated by exposure:** None generally recognized.

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

#### 4. FIRST AID MEASURES

<b>Inhalation:</b>	Remove to fresh air. If discomfort persists seek medical attention.
<b>Skin contact:</b>	Wipe off paste with paper towel or cloth. Wash with soap and water. If skin irritation persists, call a physician.
<b>Eye contact:</b>	Immediately flush eyes with plenty of water for at least 15 minutes. If eye irritation persists, consult a specialist.
<b>Ingestion:</b>	DO NOT induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms develop and persist.
<b>Notes to physician:</b>	None.

#### 5. FIRE-FIGHTING MEASURES

<b>Flash point:</b>	Greater than 93°C (200°F)
<b>Autoignition temperature:</b>	Not available
<b>Flammable/Explosive limits-lower %:</b>	Not applicable
<b>Flammable/Explosive limits-upper %:</b>	Not applicable
<b>Extinguishing media:</b>	Foam, dry chemical or carbon dioxide.
<b>Special fire fighting procedures:</b>	None
<b>Unusual fire or explosion hazards:</b>	None
<b>Hazardous combustion products:</b>	Oxides of carbon. Oxides of silicon. Formaldehyde. Acetic Acid Silica Mist.

#### 6. ACCIDENTAL RELEASE MEASURES

<b>Environmental precautions:</b>	Do not allow material to contaminate ground water system.
<b>Clean-up methods:</b>	Scrape up as much material as possible. Place scrap material in a well ventilated area and allow to cure to rubber.

## 7. HANDLING AND STORAGE

<b>Handling:</b>	Avoid contact with eyes, skin and clothing. Avoid breathing 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.
<b>Storage:</b>	Store in a dry area below 90° F
<b>Incompatible products:</b>	Keep away from strong oxidizing agents, strong Lewis or mineral acids. Avoid contact with water. Avoid exposure to light

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

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

<b>Engineering controls:</b>	Ensure adequate ventilation, especially in confined areas.
<b>Respiratory protection:</b>	Use NIOSH approved respirator if there is potential to exceed exposure limit(s).
<b>Skin protection:</b>	Use impermeable gloves and protective clothing as necessary to prevent skin contact.
<b>Eye/face protection:</b>	Chemical splash goggles or safety glasses with side shields.

**See Section 2 for exposure limits.**

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical state:</b>	Viscous liquid
<b>Color:</b>	Opaque
<b>Odor:</b>	Acetic Acid
<b>Vapor pressure:</b>	Less than 10 mm Hg at 21.1 °C (70°F)
<b>pH:</b>	Not applicable
<b>Boiling point/range:</b>	Not applicable
<b>Melting point/range:</b>	Not applicable
<b>Specific gravity:</b>	1.1
<b>Vapor density:</b>	Heavier than air
<b>Evaporation rate:</b>	Not available
<b>Solubility in water:</b>	Polymerizes in presence of water
<b>Partition coefficient (n-octanol/water):</b>	Not available
<b>VOC content:</b>	ASTM D5403 Process volatiles 2.22 %, 24.42 grams/liter; Potential volatiles 1.56 %, 17.16 grams/liter; Total volatiles 3.78 %, 41.58 grams/liter.

## 10. STABILITY AND REACTIVITY

<b>Stability:</b>	Stable.
<b>Hazardous polymerization:</b>	Will not occur.
<b>Hazardous decomposition products:</b>	Oxides of carbon. Oxides of silicon. Formaldehyde. Acetic acid is liberated slowly upon contact with moisture.
<b>Incompatibility:</b>	Acids. Bases. Oxidizing agents. Heat, sunlight, or UV light.
<b>Conditions to avoid:</b>	Product is sensitive to light and moisture.

## 11. TOXICOLOGICAL INFORMATION

### Carcinogen Status

Hazardous components	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen
Silicone Resin Proprietary	No	No	No
Silicone Resin Proprietary	No	No	No
Treated fumed silica 67762-90-7	No	No	No
Silane Derivative Proprietary	No	No	No
Photoinitiator Proprietary	No	No	No
Dibutoxydiacetoxysilane 13170-23-5	No	No	No

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

Hazardous components	Health Effects/Target Organs
Silicone Resin Proprietary	No Target Organs
Silicone Resin Proprietary	Irritant
Treated fumed silica 67762-90-7	Irritant
Silane Derivative Proprietary	Allergen, Irritant
Photoinitiator Proprietary	Irritant
Dibutoxydiacetoxysilane 13170-23-5	Allergen, Irritant

## **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**

### **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

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Identification number: None  
Packing group: None

**WaterTransportation (IMO/IMDG):**

Proper shipping name: Not regulated  
Hazard class or division: None  
Identification number: None  
Packing group: 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 above reporting de minimus.  
CERCLA/SARA Section 311/312: Immediate Health Hazard  
CERCLA/SARA 313: None above reporting de minimus.

California Proposition 65: No California Proposition 65 listed chemicals are known to be present.

### Canada Regulatory Information

CEPA DSL/NDL Status: All components are listed on or are exempt from listing on the 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: 2,3,5,8,10

Prepared by: Regulatory Affairs

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