

**RTV167  
POLYDIMETHYLSILOXANE SEALANT****1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**

**Manufactured By:** Waterford Plant  
260 Hudson River Rd  
Waterford NY 12188

**Revised:** 09/28/2009  
**Preparer:** PRODUCT STEWARDSHIP COMPLIANCE AND STANDARDS  
**CHEMTREC** 1-800-424-9300

**Chemical Family/Use:** Sealant  
**Formula:** Mixture

**HMIS**

Flammability: 1      Reactivity: 0      Health: 0

**NFPA**

Flammability: 1      Reactivity: 0      Health: 1

**2. HAZARDS IDENTIFICATION****EMERGENCY OVERVIEW**

CAUTION! May cause skin, eye, and respiratory tract irritation. Attention: Not for injection into humans.

**Form:** paste

**Color:** grey

**Odor:** sweet

**POTENTIAL HEALTH EFFECTS****INGESTION**

May cause stomach discomfort. Not an anticipated route of exposure.

**SKIN**

Uncured product contact will irritate lips, gums and tongue. Skin irritation is possible after contact with the uncured product.

**INHALATION**

Irritating to respiratory system. Applies in uncured state.

**EYES**

Eye irritation on contact with the uncured product.

**MEDICAL CONDITIONS AGGRAVATED**

None known.

**SUBCHRONIC (TARGET ORGAN )**

None known.

**CHRONIC EFFECTS / CARCINOGENICITY**

This product or one of its ingredients present at 0.1% or more is NOT listed as a carcinogen or

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suspected carcinogen by NTP, IARC, or OSHA.

**ROUTES OF EXPOSURE**

Eyes; Dermal

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

<u>PRODUCT COMPOSITION</u>	<u>CAS REG NO.</u>	<u>WGT. %</u>
<b><u>A. HAZARDOUS</u></b>		
Methyltrimethoxysilane	1185-55-3	1 - 5 %
Octamethylcyclotetrasiloxane	556-67-2	0.1 - 1 %
<b><u>B. NON-HAZARDOUS</u></b>		
Dimethylpolysiloxane	70131-67-8	60 - 100 %
Treated Silica	68937-51-9	10 - 30 %
Siloxanes & Silicones, Dimethylpolymers w/Methylsilsesquioxanes	68554-67-6	1 - 5 %

**4. FIRST AID MEASURES****INGESTION**

Do not induce vomiting. If victim is conscious, give 1-3 glasses of water to drink. Never give anything by mouth to an unconscious person. Get medical attention if irritation persists.

**SKIN**

To clean from skin, remove completely with a dry cloth or paper towel, before washing with detergent and water. If skin irritation persists, call a physician.

**INHALATION**

If inhaled, remove to fresh air. If not breathing give artificial respiration using a barrier device. If breathing is difficult give oxygen. Get medical attention.

**EYES**

In case of contact, immediately flush eyes with plenty of water for at least 15 minutes and get medical attention if irritation persists.

**NOTE TO PHYSICIAN**

Treatment is symptomatic and supportive.

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**5. FIRE-FIGHTING MEASURES**

<b>FLASH POINT:</b>	not applicable
<b>IGNITION TEMPERATURE:</b>	not applicable
<b>FLAMMABLE LIMITS IN AIR - LOWER (%):</b>	no data available
<b>FLAMMABLE LIMITS IN AIR - UPPER (%):</b>	no data available

**SENSITIVITY TO MECHANICAL IMPACT:** No

**SENSITIVITY TO STATIC DISCHARGE**  
Sensitivity to static discharge is not expected.

**EXTINGUISHING MEDIA**  
All standard extinguishing agents are suitable.

**SPECIAL FIRE FIGHTING PROCEDURES**  
Firefighters must wear NIOSH/MSHA approved positive pressure self-contained breathing apparatus with full face mask and full protective clothing.

**6. ACCIDENTAL RELEASE MEASURES**

**ACTION TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED**  
Wipe, scrape or soak up in an inert material and put in a container for disposal. Wear proper protective equipment as specified in the protective equipment section. Increase area ventilation.

**7. HANDLING AND STORAGE**

**PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE**  
Keep container closed when not in use. Avoid contact with skin and eyes. Remove contact lenses before using sealant. Do not handle lenses until all sealant has been cleaned from the fingertips, nails and cuticles. Residual sealant may remain on fingers for several days and transfer to lenses and cause severe eye irritation. Product releases methanol during application and curing. Keep away from children.

**STORAGE**  
Store away from heat, sources of ignition, and incompatibles. Keep container tightly closed.

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**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

**ENGINEERING CONTROLS**

Eyewash stations; Showers; Ventilation and other forms of engineering controls are preferred for controlling exposures. Respiratory protection may be needed for non-routine or emergency situations.

**RESPIRATORY PROTECTION**

If exposure limits are exceeded or respiratory irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Supplied air respirators may be required for non-routine or emergency situations. Respiratory protection must be provided in accordance with OSHA regulations (see 29CFR 1910.134).

**PROTECTIVE GLOVES**

Rubber gloves

**EYE AND FACE PROTECTION**

Safety glasses

**OTHER PROTECTIVE EQUIPMENT**

Wear suitable protective clothing and eye/face protection.

**Exposure Guidelines**

<u>Component</u>	<u>CAS RN</u>	<u>Source</u>	<u>Value</u>
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Absence of values indicates none found

PEL - OSHA Permissible Exposure Limit; TLV - ACGIH Threshold Limit Value; TWA - Time Weighted Average; INTL REL - Internal Recommended Exposure Limit

OSHA revoked the Final Rule Limits of January 19, 1989 in response to the 11th Circuit Court of Appeals decision (AFL-CIO v. OSHA) effective June 30, 1993. See 29 CFR 1910.1000 (58 FR 35338).

**9. PHYSICAL AND CHEMICAL PROPERTIES**

<b>BOILING POINT - C &amp; F:</b>	not applicable
<b>VAPOR PRESSURE (20 C) (MM HG):</b>	negligible
<b>FREEZING POINT:</b>	not applicable
<b>PHYSICAL STATE:</b>	paste
<b>ODOR:</b>	sweet
<b>COLOR:</b>	grey
<b>EVAPORATION RATE (BUTYL ACETATE=1):</b>	< 1
<b>SPECIFIC GRAVITY (WATER=1):</b>	ca. 1.11
<b>DENSITY:</b>	ca. 1.11 g/cm3
<b>ACID / ALKALINITY (MEQ/G):</b>	Unknown
<b>pH:</b>	not applicable
<b>SOLUBILITY IN WATER (20 C):</b>	insoluble
<b>SOLUBILITY IN ORGANIC SOLVENT (STATE SOLVENT):</b>	insoluble

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**VOLATILE ORGANIC CONTENT:** < 5.7 %(m)  
**VOC EXCL. H2O & EXEMPTS (G/L):** < 63 g/l

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

Stable

**HAZARDOUS POLYMERIZATION**

Will not occur.

**HAZARDOUS THERMAL DECOMPOSITION / COMBUSTION PRODUCTS**

Carbon dioxide (CO<sub>2</sub>); Carbon monoxide; Methanol; Silicon dioxide.; formaldehyde; This product contains methylpolysiloxanes which can generate formaldehyde at approximately 300 degrees Fahrenheit (150°C) and above, in atmospheres which contain oxygen. Formaldehyde is a skin and respiratory sensitizer, eye and throat irritant, acute toxicant, and potential cancer hazard. A MSDS for formaldehyde is available from Momentive.

**INCOMPATIBILITY (MATERIALS TO AVOID)**

None known.

**CONDITIONS TO AVOID**

None known.

**11. TOXICOLOGICAL INFORMATION****ACUTE ORAL**

Remarks: Unknown

**ACUTE DERMAL**

Remarks: Unknown

**ACUTE INHALATION**

Remarks: no data available

**OTHER**

Octamethylcyclotetrasiloxane Ingestion: Rodents given large doses via oral gavage of octamethylcyclotetrasiloxane (1600 mg/kg day, 14 days) developed increased liver weights relative to unexposed control animals due to hepatocellular hyperplasia (increased number of liver cells which appear normal) as well as hypertrophy (increased cell size). Inhalation: In inhalation studies, laboratory rodents exposed to octamethylcyclotetrasiloxane (300 ppm five days week, 90 days) developed increased liver weights in female animals relative to unexposed control animals. When the exposure was stopped, liverweights returned to normal. Microscopic examination of the liver cells did not show any evidence of pathology. Inhalation studies utilizing laboratory rabbits and guinea pigs showed no effects on liver weights. Inhalation exposures typical of industrial usage (5-10 ppm) showed no toxic effects in rodents. Range finding reproductive studies were conducted (whole body inhalation, 70 days

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prior to mating, through mating, gestation and lactation) with octamethylcyclotetrasiloxane (D4). Rats were exposed to 70 and 700 ppm. In the 700 ppm group, there was a statistically significant reduction in mean litter size and in implantation sites. No D4 related clinical signs were observed in the pups and no exposure related pathological findings were found. Interim results from a two generation reproductive study in rats exposed to 500 and 700 ppm D4 (whole body inhalation, 70 days prior to mating, through mating, gestation and lactation) resulted in a statistically significant decrease in live mean litter size as well as extended periods of off-spring delivery (dystocia). These results were not observed at the 70 and 300 ppm dosing levels. Preliminary results from an ongoing 24-month combined chronic/oncogenicity study in rats exposed to 10, 30, 150, or 700 ppm D4 showed test-article related effects in the kidney (male and female) and uterus of rats exposed for 12 to 24 months. These effects include increased kidney weight and severity of chronic nephropathy, increased uterine weight, increased incidence of endometrial cell hyperplasia, and an increased incidence of endometrial adenomas. All of these effects are limited to the 700 ppm exposure group. These results have been shown to be rat-specific. Further studies are ongoing. In developmental toxicity studies, rats and rabbits were exposed to octamethylcyclotetrasiloxane at concentrations up to 700 ppm and 500 ppm respectively. No teratogenic effects (birth defects) were observed in either study.

**SENSITIZATION**

no data available

**SKIN IRRITATION**

no data available

**EYE IRRITATION**

no data available

**MUTAGENICITY**

Unknown

**OTHER EFFECTS OF OVEREXPOSURE**

This product contains methylpolysiloxanes which can generate formaldehyde at approximately 300 degrees Fahrenheit (150°C) and above, in atmospheres which contain oxygen. Formaldehyde is a skin and respiratory sensitizer, eye and throat irritant, acute toxicant, and potential cancer hazard. A MSDS for formaldehyde is available from Momentive., Methanol released during curing., Contains octamethylcyclotetrasiloxane which may cause reproductive effects based on animal data.

**12. ECOLOGICAL INFORMATION****ECOTOXICITY**

no data available

**DISTRIBUTION**

no data available

**CHEMICAL FATE**

no data available

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Disposal should be made in accordance with federal, state and local regulations.

**14. TRANSPORT INFORMATION****Further Information:**

This product is not regarded as dangerous goods according to the national and international regulations on the transport of dangerous goods.

**15. REGULATORY INFORMATION****Inventories**

EU list of existing chemical substances	q (quantity restricted)	
Canada DSL Inventory	y (positive listing)	
Korea Existing Chemicals Inventory (KECI)	y (positive listing)	
China Inventory of Existing Chemical Substances	y (positive listing)	
Australia Inventory of Chemical Substances (AICS)	y (positive listing)	
Philippines Inventory of Chemicals and Chemical Substances (PICCS)	y (positive listing)	
Canada NDSL Inventory	n (Negative listing)	
Japan Inventory of Existing & New Chemical Substances (ENCS)	q (quantity restricted)	
TSCA list	y (positive listing)	On TSCA Inventory

For inventories that are marked as quantity restricted or special cases, please contact Momentive.

**US Regulatory Information****CERCLA**

Reportable quantity: 188679 lbs  
Reportable quantity: 50000000 lbs

**PRODUCT COMPOSITION****Chemical****CERCLA Reportable Quantity****SARA (311,312) HAZARD CLASS**

Acute Health Hazard

**SARA (313) CHEMICALS**

50-00-0, Formaldehyde.

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**CALIFORNIA PROPOSITION 65**

Warning! This product contains a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.  
50-00-0, . 71-43-2, Benzene.

**Canadian Regulatory Information****WHMIS HAZARD CLASS**

D2A - Very Toxic Material Causing Other Toxic Effects

**16. OTHER INFORMATION****OTHER**

These data are offered in good faith as typical values and not as product specifications. No warranty, either expressed or implied, is made. The recommended industrial hygiene and safe handling procedures are believed to be generally applicable. However, each user should review these recommendations in the specific context of the intended use and determine whether they are appropriate., C = ceiling limit NEGL = negligible EST = estimated NF = none found NA = not applicable UNKN = unknown NE = none established REC = recommended ND = none determined V = recommended by vendor SKN = skin TS = trade secret R = recommended MST = mist NT = not tested STEL = short term exposure limit ppm = parts per million ppb = parts per billion By-product= reaction by-product, TSCA inventory status not required under 40 CFR part 720.30(h-2).