

SAFETY DATA SHEET

Classified in accordance with 29 CFR 1910.1200

1. Identification

Product identifier: RTV118

Other means of identification

Synonyms: FLOWABLE ACETOXY SEALANT

Recommended use and restriction on use

Recommended use: Silicone Elastomer

Restrictions on use: For industrial use only.

Manufacturer/Importer/Distributor Information : Momentive Performance Materials USA LLC
2750 Balltown Road,
Niskayuna, NY 12309

Contact person : commercial.services@momentive.com

Telephone : General information
+1-800-295-2392

Emergency telephone number
Supplier : CHEMTREC
1-800-424-9300

2. Hazard(s) identification

Hazard Classification

Health Hazards

Toxic to reproduction

Category 2

Label Elements

Hazard Symbol:



Signal Word: Warning

Hazard Statement: H361f; Suspected of damaging fertility.

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Precautionary Statements

Prevention: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required.

Response: IF exposed or concerned: Get medical advice/attention.

Storage: Store locked up.

Disposal: Dispose of contents/ container to an approved facility in accordance with local, regional, national and international regulations.

Hazard(s) not otherwise classified (HNOC): None.

Substance(s) formed under the conditions of use: Reacts with water liberating small amounts of methanol.

3. Composition/information on ingredients

Mixtures

Chemical Identity	CAS number	Content in percent (%)*	Notes
Silica	7631-86-9	10 - <20%	# This substance has workplace exposure limit(s).
Octamethylcyclotetrasiloxane	556-67-2	1 - <3%	No data available.

* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

(1) The respirable particle(s) listed above are inextricably bound within the polymer matrix, and therefore does not present an inhalation hazard during normal use of this product. Tooling or machining of the cured product (sanding, cutting, milling) may release hazardous, respirable substances.

4. First-aid measures

General information: No action shall be taken involving any personal risk or without suitable training.

Ingestion: If swallowed, do NOT induce vomiting. Give a glass of water.

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.

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Skin Contact: To clean from skin, remove completely with a dry cloth or paper towel, before washing with detergent and water. If skin irritation occurs: Get medical advice/attention. Continue to rinse for at least 15 minutes.

Eye contact: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

Most important symptoms/effects, acute and delayed

Symptoms: Product may hydrolyse on contact with moisture and upon contact with bodily fluids to produce methanol, which is readily and rapidly absorbed at all exposure routes and is toxic by all routes. Therefore, consider the signs/symptoms of methanol poisoning and also observe the known latency period of several days.

Hazards: No data available.

Indication of immediate medical attention and special treatment needed

Treatment: Treatment is symptomatic and supportive. This product reacts with moisture in the acid contents of the stomach to form methanol.

5. Fire-fighting measures

General Fire Hazards: Use standard firefighting procedures and consider the hazards of other involved materials.

Suitable (and unsuitable) extinguishing media

Suitable extinguishing media: All standard extinguishing agents are suitable.

Unsuitable extinguishing media: Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical: Pay attention to the corrosive effects arising from contact with water. Reacts with water liberating small amounts of methanol.

Special protective equipment and precautions for fire-fighters

Special fire-fighting procedures: Use water spray to keep fire-exposed containers cool.

Special protective equipment for fire-fighters: Firefighters must wear NIOSH/MSHA approved positive pressure self-contained breathing apparatus with full face mask and full protective clothing.

6. Accidental release measures

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**Personal precautions,
protective equipment and
emergency procedures:**

Product releases acetic acid during application and curing. Use only in well-ventilated areas. Avoid contact with skin and eyes. Remove contact lenses before using sealant. Do not handle lenses until all sealant has been cleaned from the finger and hands. May generate formaldehyde at temperatures greater than 150 C(300 F). See Section 8 of the SDS for Personal Protective Equipment.

**Methods and material for
containment and cleaning
up:**

Wipe, scrape or soak up in an inert material and put in a container for disposal. Wash walking surfaces with detergent and water to reduce slipping hazard. Wear proper protective equipment as specified in the protective equipment section.

Notification Procedures:

ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). See Section 8 of the SDS for Personal Protective Equipment.

Environmental Precautions:

Do not allow runoff to sewer, waterway or ground.

7. Handling and storage

Precautions for safe handling:

Acetic acid is formed during processing. Wear appropriate personal protective equipment. Use only in well-ventilated areas. Keep away from food, drink and animal feeding stuffs. When using do not eat, drink or smoke. Keep containers tightly closed. See Section 8 of the SDS for Personal Protective Equipment. Sensitivity to static discharge is not expected.

**Conditions for safe storage,
including any
incompatibilities:**

Keep out of the reach of children. Keep container tightly closed.

8. Exposure controls/personal protection

Control Parameters

Occupational Exposure Limits

Chemical Identity	Type	Exposure Limit Values	Source
Silica - Respirable particles.	TWA	3 mg/m3	US. ACGIH Threshold Limit Values, as amended (01 2021)
Silica - Inhalable particles.	TWA	10 mg/m3	US. ACGIH Threshold Limit Values, as amended (01 2021)
Silica - Total dust.	TWA	15 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended (1989)
Silica - Respirable fraction.	TWA	5 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended (1989)
	TWA PEL	5 mg/m3	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants, as amended (12 2017)
Silica - Total dust.	TWA PEL	10 mg/m3	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants, as amended (12 2017)
Silica - Respirable fraction.	TWA	15 millions of particles per cubic foot of air	US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (09 2016)

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Silica - Total dust.	TWA	15 mg/m ³	US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (09 2016)
	TWA	50 millions of particles per cubic foot of air	US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (09 2016)
Silica - Respirable fraction.	TWA	5 mg/m ³	US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (09 2016)
Silica	TWA	0.8 mg/m ³	US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (09 2016)
	TWA	20 millions of particles per cubic foot of air	US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (09 2016)

This product contains one or more substances with an occupational exposure limit. However, the respirable particle(s) of this/these substance(s) are inextricably bound within the polymer matrix. Therefore, we do not expect an exposure to this/these substance(s) during normal use of this product. Tooling or machining of the cured product (sanding, cutting, milling) may release hazardous, respirable substances.

Appropriate Engineering Controls

Eye wash facilities and emergency shower must be available when handling this product.

Individual protection measures, such as personal protective equipment

General information: No data available.

Eye/face protection: Safety glasses with side shields Use face shield in case of splash risk.

Skin Protection

Hand Protection: Use chemical-resistant, impervious gloves.

Other: Wear suitable protective clothing and eye/face protection.

Respiratory Protection: If inhalation exposure is expected, 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).

Hygiene measures: Avoid contact with eyes, skin, and clothing. Ensure adequate ventilation, especially in confined areas. Observe good industrial hygiene practices. Wash hands before breaks and immediately after handling the product. When using do not eat, drink or smoke.

9. Physical and chemical properties

Appearance

Physical state: solid

Form: Paste

Color: Colorless

Odor: Acetic acid.

Odor threshold: No data available.

pH: No data available.

Melting point/freezing point: No data available.

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Initial boiling point and boiling range :	No data available.
Flash Point:	ca. 72 °C (Closed Cup)
Evaporation rate:	No data available.
Flammability (solid, gas):	No data available.
Upper/lower limit on flammability or explosive limits	
Flammability limit - upper (%):	No data available.
Flammability limit - lower (%):	No data available.
Explosive limit - upper:	No data available.
Explosive limit - lower:	No data available.
Heat of combustion:	No data available.
Vapor pressure:	No data available.
Vapor density:	No data available.
Density:	ca. 1.05 g/cm ³
Relative density:	ca. 1.05
Solubility(ies)	
Solubility in water:	Insoluble
Solubility (other):	Soluble in toluene
Partition coefficient (n-octanol/water) Log Pow:	No data available.
Auto-ignition temperature:	No data available.
Decomposition temperature:	No data available.
SADT:	No data available.
Viscosity, dynamic:	No data available.
Viscosity, kinematic:	No data available.
VOC:	20 g/l ;

10. Stability and reactivity

Reactivity:	Reacts with water.
Chemical Stability:	Material is stable under normal conditions.
Possibility of hazardous reactions:	Hazardous polymerization does not occur.
Conditions to avoid:	Reacts with water liberating small amounts of acetic acid.
Incompatible Materials:	Strong Acids, Strong Bases Water.
Hazardous Decomposition Products:	Carbon dioxide Acetic acid. Silicon dioxide. Formaldehyde. Measurements at temperatures above 150°C in presence of air (oxygen) have shown that small amounts of formaldehyde are formed due to oxidative degradation.

11. Toxicological information**Information on likely routes of exposure**

Ingestion: No data available.

Inhalation: No data available.

Skin Contact: No data available.

Eye contact: No data available.

Symptoms related to the physical, chemical and toxicological characteristics

Ingestion: No data available.

Inhalation: No data available.

Skin Contact: No data available.

Eye contact: No data available.

Information on toxicological effects**Acute toxicity (list all possible routes of exposure)****Oral**

Product: Not classified for acute toxicity based on available data.

Specified substance(s):

Silica LD 50 (Rat): > 15,000 mg/kg

Octamethylcyclotetrasiloxane LD 50 (Rat): > 4,800 mg/kg

Dermal

Product: Not classified for acute toxicity based on available data.

Specified substance(s):

Octamethylcyclotetrasiloxane LD 50 (Rat): > 2,375 mg/kg

Inhalation

Product: Not classified for acute toxicity based on available data.

Specified substance(s):

Octamethylcyclotetrasiloxane LC50 (Rat): 36 mg/l

Repeated dose toxicity

Product: No data available.

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Skin Corrosion/Irritation

Product: No data available.

Specified substance(s):

Silica (Rabbit): No skin irritation

Specified substance(s):

Octamethylcyclotetrasiloxane OECD Test Guideline 404 (Rabbit): Non irritating

Serious Eye Damage/Eye Irritation

Product: No data available.

Specified substance(s):

Octamethylcyclotetrasiloxane OECD-Guideline 405 (Acute Eye Irritation/Corrosion) (Rabbit): Non irritating

Respiratory or Skin Sensitization

Product: No data available.

Carcinogenicity

Product: No data available.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053), as amended:

No carcinogenic components identified

Germ Cell Mutagenicity

In vitro

Product: No data available.

Specified substance(s):

Octamethylcyclotetrasiloxane Ames-Test (OECD-Guideline 471 (Genetic Toxicology: Salmonella typhimurium, Reverse Mutation Assay)): negative (not mutagenic)
Mouse Lymphoma Assay (OECD Guideline 476): negative (not mutagenic)

In vivo

Product: No data available.

Specified substance(s):

Octamethylcyclotetrasiloxane Chromosomal aberration (OECD 475) Inhalation (Rat, male and female): negative
Dominant lethal assay (OECD 478) Oral (Rat, male and female): negative

Reproductive toxicity

Product: No data available.

Specific Target Organ Toxicity - Single Exposure

Product: No data available.

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Specific Target Organ Toxicity - Repeated Exposure

Product: No data available.

Aspiration Hazard

Product: No data available.

Other effects:

Acetic acid released during curing. Octamethylcyclotetrasiloxane (D4)
Ingestion: Rodents given large doses via oral gavage of Octamethylcyclotetrasiloxane (1600mg/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, liver weights returned to normal. Microscopic examination of the liver cells did not show any evidence of pathology. This response in rats, which does not affect the animal's health, is well-documented and widely recognized. It is related to an increase of liver enzymes that metabolize and eliminate a material from the body. The increased liver weight reverses even while the D4 exposure continues. The finding is not adverse, but is considered a natural adaptive change in rats, and does not represent a hazard to humans. 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 prior to mating, through mating, gestation and lactation), with 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. A two-year, combined chronic/carcinogenicity study, during which rats were exposed to D4 by inhalation, data showed a statistically significant increase in a benign uterine tumor in female rats exposed at the highest level--a level much higher than the low levels that consumers or workers may encounter. An expert panel of independent scientists who have reviewed the results of this research concur that the finding seen in the two-year study occurred through a biological pathway that is specific to the rat and is not relevant to humans. Therefore, this observed effect does not indicate a potential health hazard to humans. In developmental toxicity studies, rats and rabbits were exposed to D4 at concentrations up to 700 ppm and 500 ppm, respectively. No teratogenic effects (birth defects) were observed in either study.

12. Ecological information

Ecotoxicity:

Acute hazards to the aquatic environment:

Fish

Product: No data available.

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Specified substance(s):

Silica LC0 (Brachydanio rerio, 96 h): 5,000 mg/l

Octamethylcyclotetrasiloxane No toxicity at the limit of solubility ; LC50 (Oncorhynchus mykiss, 96 h): > 0.022 mg/l

Aquatic Invertebrates

Product: No data available.

Specified substance(s):

Octamethylcyclotetrasiloxane No toxicity at the limit of solubility ; EC50 (Daphnia magna, 48 h): > 0.015 mg/l

Chronic hazards to the aquatic environment:

Fish

Product: No data available.

Specified substance(s):

Silica LC0 (Brachydanio rerio, 4 d): 5,000 mg/l

Octamethylcyclotetrasiloxane No toxicity at the limit of solubility ; NOEC (Oncorhynchus mykiss, 93 d): >= 0.0044 mg/l

Aquatic Invertebrates

Product: No data available.

Specified substance(s):

Octamethylcyclotetrasiloxane No toxicity at the limit of solubility ; NOEC (Daphnia magna, 21 d): > 0.015 mg/l

Toxicity to Aquatic Plants

Product: No data available.

Specified substance(s):

Octamethylcyclotetrasiloxane No toxicity at the limit of solubility ; ErC50 (Selenastrum capricornutum, 96 h): > 0.022 mg/l

Persistence and Degradability

Biodegradation

Product: No data available.

Specified substance(s):

Octamethylcyclotetrasiloxane 3.7 % (29 d, 310 Ready Biodegradability - CO₂ in Sealed Vessels (Headspace Test)) Not readily biodegradable.

BOD/COD Ratio

Product: No data available.

Bioaccumulative potential

Bioconcentration Factor (BCF)

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Product: No data available.

Specified substance(s):

Octamethylcyclotetrasiloxane Bioconcentration Factor (BCF): 12,400

Partition Coefficient n-octanol / water (log Kow)

Product: No data available.

Mobility in soil: No data available.

Known or predicted distribution to environmental compartments

Silica No data available.

Octamethylcyclotetrasiloxane No data available.

Other adverse effects: No data available.

13. Disposal considerations

General information: The generation of waste should be avoided or minimized wherever possible. See Section 8 for information on appropriate personal protective equipment. Do not discharge into drains, water courses or onto the ground.

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

Contaminated Packaging: Dispose of as unused product.

14. Transport information

DOT

Not Regulated.

IATA

Not Regulated.

IMDG Code

Not Regulated.

Special precautions for user: This product is not regarded as dangerous goods according to the national and international regulations on the transport of dangerous goods.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Product is not transported in bulk.

15. Regulatory information

US Federal Regulations

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Chemical Identity

Octamethylcyclotetrasiloxane

Reportable quantity

The minimum concentration: TSCA 4: 1.0%
One-Time Export Notification only.

US. Toxic Substances Control Act (TSCA) Section 5(a)(2) Proposed Significant New Use Rules (SNURs) (40 CFR 721, Subpt E)

None present or none present in regulated quantities.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053), as amended

None present or none present in regulated quantities.

CERCLA Hazardous Substance List (40 CFR 302.4):

None present or none present in regulated quantities.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

Reproductive toxicity

US. EPCRA (SARA Title III) Section 304 Extremely Hazardous Substances Reporting Quantities and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Hazardous Substances

None present or none present in regulated quantities.

US. EPCRA (SARA Title III Section 313 Toxic Chemical Release Inventory (TRI) Reporting

None present or none present in regulated quantities.

Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)

None present or none present in regulated quantities.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130):

None present or none present in regulated quantities.

US State Regulations

US. California Proposition 65

No ingredient requiring a warning under CA Prop 65.

US. New Jersey Worker and Community Right-to-Know Act

Chemical Identity

Siloxanes and Silicones, di-Me hydroxy terminated

Siloxanes and Silicones, di-Me, polymers with Me silsesquioxanes, hydroxy-terminated

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Octamethylcyclotetrasiloxane
Methyltriacetoxysilane
METHYLDIACETOXYISOPROPOXYSILANE

US. Massachusetts RTK - Substance List

No ingredient regulated by MA Right-to-Know Law present.

US. Pennsylvania RTK - Hazardous Substances

Chemical Identity

Silica

US. Rhode Island RTK

No ingredient regulated by RI Right-to-Know Law present.

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Inventory Status:

Australia Industrial Chem. Act (AIIC):	On or in compliance with the inventory	Remarks: None.
Canada DSL Inventory List:	Q (quantity restricted)	Remarks: Please contact your supplier for further information on the inventory status of this material.
Canada NDSL Inventory:	Not in compliance with the inventory.	Remarks: None.
China Inv. Existing Chemical Substances:	On or in compliance with the inventory	Remarks: None.
Japan (ENCS) List:	On or in compliance with the inventory	Remarks: None.
Korea Existing Chemicals Inv. (KECI):	On or in compliance with the inventory	Remarks: None.
New Zealand Inventory of Chemicals:	On or in compliance with the inventory	Remarks: None.
Philippines PICCS:	On or in compliance with the inventory	Remarks: None.
Taiwan Chemical Substance Inventory:	On or in compliance with the inventory	Remarks: None.
US TSCA Inventory:	On or in compliance with the inventory	Remarks: Commercial Status: Active
REACH:	If purchased from Momentive Performance Materials GmbH in Leverkusen, Germany, all substances in this product have been registered by Momentive Performance Materials GmbH or upstream in our supply chain or are exempt from registration under Regulation (EC) No 1907/2006 (REACH). For polymers, this includes the constituent monomers and other reactants.	Remarks: None.

16. Other information, including date of preparation or last revision

HMIS Hazard ID

Health	*	0
Flammability		0
Physical Hazards		1
PERSONAL PROTECTION		

Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe; RNP - Rating not possible; *Chronic health effect

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Issue Date: 04/25/2024

Revision Date: No data available.

Version #: 5.2

Further Information: No data available.

Disclaimer:

Notice to reader

Unless otherwise specified in section 1, Momentive products are intended for use in the manufacture and/or formulation of products and are not intended for direct consumer use. These products are not intended for long-lasting (> 30 days) implantation, injection or direct ingestion into the human body, nor for use in the manufacture of multiple use contraceptives. Keep out of the reach of children.

Further Information

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

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