

Revision Date: 10/07/2020

RTV 102

SAFETY DATA SHEET

1. Identification

Product identifier: RTV 102

Other means of identification

Synonyms: Acetoxy Sealant (White)

Recommended use and restriction on use

Recommended use: Silicone Elastomer

Restrictions on use: Not known.

Manufacturer/Importer/Distr : Momentive Amer Ind.

ibutor Information 260 HUDSON RIVER RD, 12188-1910 , USA 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: H361; Suspected of damaging fertility or the unborn child.

Precautionary

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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 appropriate treatment and disposal

facility in accordance with applicable laws and regulations, and product

characteristics at time of disposal.

Hazard(s) not otherwise classified (HNOC):

None.

Substance(s) formed under the

conditions of use:

Generates acetic acid during cure.

3. Composition/information on ingredients

Mixtures

Chemical Identity	CAS number	Content in percent (%)*	Notes
Silane, dichlorodimethyl-, reaction products with silica	68611-44-9	10 - <20%	# This substance has workplace exposure limit(s).
Octamethylcyclotetrasiloxane	556-67-2	1 - <3%	# This substance has workplace exposure limit(s).
(1) TITANIUM DIOXIDE	13463-67-7	1 - <5%	# This substance has workplace exposure limit(s).

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

4. First-aid measures

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

training.

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⁽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.



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

victim anything to drink if he is unconscious. Get medical attention.

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.

Skin Contact: Wash with soap and water.

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: None known.

Hazards: No data available.

Indication of immediate medical attention and special treatment needed

Treatment: Treatment is symptomatic and supportive.

5. Fire-fighting measures

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

involved materials. Prevent runoff from fire control or dilution from entering

streams, sewers, or drinking water supply.

Suitable (and unsuitable) extinguishing media

Suitable extinguishing

media:

All standard extinguishing agents are suitable.

Unsuitable extinguishing

media:

Do not use water jet.

Specific hazards arising from

the chemical:

In case of fire, carbon monoxide and carbon dioxide may be formed. Acute overexposure to the products of combustion may result in irritation of the respiratory tract. Pay attention to the corrosive effects arising from contact with water.

Special protective equipment and precautions for firefighters

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 selfcontained breathing apparatus with full face mask and full protective

clothing.

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6. Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Avoid contact with eyes, skin, and clothing. Use only in well-ventilated areas. Avoid accidental ingestion of this material. Wash hands and face before eating, drinking, smoking, using toilet facilities, or applying cosmetics.

Remove contact lenses before using sealant. Do not handle lenses until all sealant has been cleaned from the finger and hands. Keep out of reach of children. Keep container closed. 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.

7. Handling and storage

Precautions for safe handling:

Sensitivity to static discharge is not expected. 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.

Conditions for safe storage, including any incompatibilities:

Keep container tightly closed in a cool, well-ventilated place.

8. Exposure controls/personal protection

Control Parameters

Occupational Exposure Limits

Chemical Identity	Туре	Exposure Limit Values	Source
Silane, dichlorodimethyl-, reaction products w ith silica	TWA	0.8 mg/m3	US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (03 2016)
	TWA	20 millions of particles per cubic foot of air	US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (03 2016)
Silane, dichlorodimethyl-, reaction products w ith silica - Particulate.	ST ESL	27 μg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended (06 2018)
(1) TITANIUM DIOXIDE	TWA	10 mg/m3	US. ACGIH Threshold Limit Values, as amended (03 2015)
(1) TITANIUM DIOXIDE - Total dust.	PEL	15 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as

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		T	amended (02 2006)
	TWA	10/	US. OSHA Table Z-1-A (29 CFR 1910.1000),
	IVVA	10 mg/m3	as amended (1989)
	TWA	10/	
	IVVA	10 mg/m3	US. Tennessee. OELs. Occupational Exposure
(4) TITA NIII INA DIOVIDE	OT FOL	50 / 0	Limits, Table Z1A, as amended (06 2008)
(1) TITANIUM DIOXIDE -	ST ESL	50 μg/m3	US. Texas. Effects Screening Levels (Texas
Particulate.			Commission on Environmental Quality), as
			amended (11 2016)
	AN ESL	5 μg/m3	US. Texas. Effects Screening Levels (Texas
			Commission on Environmental Quality), as
			amended (11 2016)
(1) TITANIUM DIOXIDE -	TWA PEL	10 mg/m3	US. California Code of Regulations, Title 8,
Total dust.			Section 5155. Airborne Contaminants, as
			amended (01 2015)
(1) TITANIUM DIOXIDE -	TWA PEL	5 mg/m3	US. California Code of Regulations, Title 8,
Respirable fraction.		_	Section 5155. Airborne Contaminants, as
·			amended (01 2015)
	TWA	15 millions of	US. OSHA Table Z-3 (29 CFR 1910.1000), as
		particles per	amended (03 2016)
		cubic foot of	
		air	
(1) TITANIUM DIOXIDE -	TWA	15 mg/m3	US. OSHA Table Z-3 (29 CFR 1910.1000), as
Total dust.			amended (03 2016)
(1) TITANIUM DIOXIDE -	TWA	5 mg/m3	US. OSHA Table Z-3 (29 CFR 1910.1000), as
Respirable fraction.		_	amended (03 2016)
(1) TITANIUM DIOXIDE -	TWA	50 millions of	US. OSHA Table Z-3 (29 CFR 1910.1000), as
Total dust.		particles per	amended (03 2016)
		cubic foot of	,
		air	
(1) TITANIUM DIOXIDE	IDLH	5,000 mg/m3	US. NIOSH. Immediately Dangerous to Life or
			Health (IDLH) Values, as amended (10 2017)
Octamethylcyclotetrasiloxane	TWA	5 ppm	
Octamethylcyclotetrasiloxane	ST ESL	1,000 µg/m3	US. Texas. Effects Screening Levels (Texas
- Vapor.			Commission on Environmental Quality), as
			amended (11 2016)
	AN ESL	100 μg/m3	US. Texas. Effects Screening Levels (Texas
			Commission on Environmental Quality), as
			amended (11 2016)
Octamethylcyclotetrasiloxane	TWA	10 ppm	US. OARS. WEELs Workplace Environmental
			Exposure Level Guide, as amended (2014)
	l .	l .	

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

Provide adequate general and local exhaust ventilation. Eye washes and

showers for emergency use.

Individual protection measures, such as personal protective equipment

General information: No data available.

Eye/face protection: Safety glasses with side shields

Skin Protection

Hand Protection: Use chemical-resistant, impervious gloves.

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

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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: White
Odor: Acetic acid.

Odor threshold:No data available.pH:No data available.Melting point/freezing point:No data available.Initial boiling point and boiling range:Not applicable

Flash Point: > 93.3 °C (estimated)

Evaporation rate: < 1

Flammability (solid, gas): No data available.

Upper/lower limit on flammability or explosive limits

Flammability limit - upper (%):

Flammability limit - lower (%):

Explosive limit - upper:

Explosive limit - lower:

No data available.

No data available.

No data available.

No data available.

Vapor pressure: No data available.

Vapor density:No data available.Density:ca. 1.06 g/cm3Relative density:ca. 1.06

Solubility(ies)

Solubility in water: Insoluble

Solubility (other): No data available.

Partition coefficient (n-octanol/water) Log

Not applicable

Pow:

Auto-ignition temperature:No data available.Decomposition temperature:No data available.SADT:No data available.

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Viscosity, dynamic:No data available.Viscosity, kinematic:No data available.

VOC: 26 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: Keep away from moisture. Reacts with water liberating small amounts of

acetic acid.

Incompatible Materials: Strong Acids, Strong Bases Water.

Hazardous Decomposition

Products:

Carbon dioxide 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: ATEmix: 8,714 mg/kg

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Specified substance(s):

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

ane

(1) TITANIUM DIOXIDE LD 50 (Rat): > 10,000 mg/kg

Dermal

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

Specified substance(s):

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

ane

(1) TITANIUM DIOXIDE LD 50 (Rabbit): > 10,000 mg/kg

Inhalation

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

Specified substance(s):

Octamethylcyclotetrasilox LC50 (Rat): 36 mg/l

ane

(1) TITANIUM DIOXIDE LC50 (Rat): > 6.8 mg/l

Repeated dose toxicity

Product: No data available.

Skin Corrosion/Irritation

Product: No data available.

Specified substance(s):

Octamethylcyclotetrasil OECD-Guideline 404 (Acute Dermal Irritation/Corrosion) (Rabbit): Slightly

oxane irritating.

Serious Eye Damage/Eye Irritation

Product: No data available.

Specified substance(s):

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

oxane

Specified substance(s):

(1) TITANIUM DIOXIDE No eye irritation

Respiratory or Skin Sensitization

Product: No data available.

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Carcinogenicity

Product: No data available.

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:

No carcinogenic components identified US. National Toxicology Program (NTP) Report on Carcinogens:

No carcinogenic components identified

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050), as amended:

No carcinogenic components identified

Germ Cell Mutagenicity

In vitro

Product: No data available.

Specified substance(s):

Octamethylcyclotetrasilox Ames-Test (OECD-Guideline 471 (Genetic Toxicology: Salmonella

ane typhimurium, Reverse Mutation Assay)): negative (not mutagenic)

Mouse Lymphoma Assay (OECD Guidline 476): negative (not mutagenic)

In vivo

Product: No data available.

Specified substance(s):

Octamethylcyclotetrasilox Chromosomal aberration (OECD-Guideline 474 (Genetic Toxicology:

Micronucleus Test)) Inhalation (Rat, male and female): negative

Reproductive toxicity

ane

Product: No data available.

Specific Target Organ Toxicity - Single Exposure
Product:

No data available.

Specific Target Organ Toxicity - Repeated Exposure

Product: No data available.

Aspiration Hazard

Product: No data available.

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Other effects:

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.

Specified substance(s):

(1) TITANIUM DIOXIDE LC0 (Leuciscus idus, 48 h): > 1,000 mg/l

Aquatic Invertebrates

Product: No data available.

Chronic hazards to the aquatic environment:

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Fish

Product: No data available.

Aquatic Invertebrates

Product: No data available.

Toxicity to Aquatic Plants

Product: No data available.

Persistence and Degradability

Biodegradation

Product: No data available.

Specified substance(s):

Octamethylcyclotetrasilox 3.7 % (29 d, 310 Ready Biodegradability - CO₂ in Sealed Vessels

ane (Headspace Test)) Not readily biodegradable.

(1) TITANIUM DIOXIDE 0 %

BOD/COD Ratio

Product: No data available.

Bioaccumulative potential

Bioconcentration Factor (BCF)

Product: No data available.

Specified substance(s):

Octamethylcyclotetrasilox Fathead Minnow, Bioconcentration Factor (BCF): 12.40

ane

Partition Coefficient n-octanol / water (log Kow)

Product: Log Kow: Not applicable

Mobility in soil: No data available.

Known or predicted distribution to environmental compartments

Silane, dichlorodimethyl-, No data available.

reaction products with silica

Octamethylcyclotetrasiloxa No data available.

ne

(1) TITANIUM DIOXIDE No data available.

Other adverse effects: No data available.

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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.

IMDG

Not regulated.

IATA

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.

15. Regulatory information

US Federal Regulations

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

<u>Chemical Identity</u> <u>Reportable quantity</u>

Octamethylcyclotetrasilox The minimum concentration: TSCA 4: 1.0%

ane One-Time Export Notification only.

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

None present or none present in regulated quantities.

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US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050), as amended

Chemical Identity OSHA hazard(s) Dimethylpolysiloxane No OSHA Hazards

Silane, dichlorodimethyl-, reaction products with

No OSHA Hazards

silica

Siloxanes and Silicones, No OSHA Hazards

di-Me hydroxy terminated

Siloxanes and Silicones, No OSHA Hazards di-Me, polymers with Me

silsesquioxanes, hydroxyterminated

Octamethylcyclotetrasilox

Systemic effects

Irritant. (1) TITANIUM DIOXIDE

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

SARA 302 Extremely Hazardous Substance

None present or none present in regulated quantities.

SARA 304 Emergency Release Notification

None present or none present in regulated quantities.

SARA 311/312 Hazardous Chemical

Chemical Identity Threshold Planning Quantity

US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 313 Toxic Chemicals (40 CFR 372.65) - Supplier Notification Required

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.

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

Dimethylpolysiloxane

Silane, dichlorodimethyl-, reaction products with silica

Siloxanes and Silicones, di-Me hydroxy terminated

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

hydroxy-terminated

Methyltriacetoxysilane

(1) TITANIUM DIOXIDE

US. Massachusetts RTK - Substance List

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

US. Pennsylvania RTK - Hazardous Substances

Chemical Identity

(1) TITANIUM DIOXIDE

US. Rhode Island RTK

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

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Inventory Status:

niveniory Status.		
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.
Australia AICS:	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.
EINECS, ELINCS or NLP:	On or in compliance with the inventory	Remarks: None.
Japan (ENCS) List:	On or in compliance with the inventory	Remarks: None.
China Inv. Existing Chemical Substances:	On or in compliance with the inventory	Remarks: None.
Korea Existing Chemicals Inv. (KECI):	On or in compliance with the inventory	Remarks: None.
Canada NDSL Inventory:	Not in compliance with the inventory.	Remarks: None.
Philippines PICCS:	On or in compliance with the inventory	Remarks: None.
US TSCA Inventory:	On or in compliance with the inventory	Remarks: None.
New Zealand Inventory of Chemicals:	On or in compliance with the inventory	Remarks: None.
Taiwan Chemical Substance Inventory:	On or in compliance with the inventory	Remarks: None.

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

HMIS Hazard ID

Health	*	0
Flammability		0
Physical Hazards		1
PERSONAL PROTECTION	ON	

Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe; RNP - Rating not

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possible; *Chronic health effect

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Revision Date: No data available.

Version #: 4.0

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 ofour knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safehandling, 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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RTV 103 - black

SAFETY DATA SHEET

1. Identification

Product identifier: RTV 103 - black

Other means of identification

Synonyms: ACETOXY SEALANT (black)

Recommended use and restriction on use

Recommended use: Silicone Elastomer **Restrictions on use:** For industrial use only.

Manufacturer/Importer/Distr :

ibutor Information

Momentive Performance Materials LLC

260 Hudson River Road Waterford NY 12188

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: H361; Suspected of damaging fertility or the unborn child.

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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 appropriate treatment and disposal

facility in accordance with applicable laws and regulations, and product

characteristics at time of disposal.

Hazard(s) not otherwise classified (HNOC):

None.

Substance(s) formed under the

conditions of use:

Generates acetic acid during cure.

3. Composition/information on ingredients

Mixtures

Chemical Identity	CAS number	Content in percent (%)*	Notes
Silane, dichlorodimethyl-, reaction products with silica	68611-44-9	10 - <20%	# This substance has workplace exposure limit(s).
Octamethylcyclotetrasiloxane	556-67-2	1 - <3%	# This substance has workplace exposure limit(s).

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

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. Do not give

victim anything to drink if he is unconscious. Get medical attention.

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: Wash with soap and water.

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: None known.

Hazards: No data available.

Indication of immediate medical attention and special treatment needed

Treatment: Treatment is symptomatic and supportive.

5. Fire-fighting measures

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

involved materials. Prevent runoff from fire control or dilution from entering

streams, sewers, or drinking water supply.

Suitable (and unsuitable) extinguishing media

Suitable extinguishing

media:

All standard extinguishing agents are suitable.

Unsuitable extinguishing

media:

Do not use water jet.

Specific hazards arising from

the chemical:

In case of fire, carbon monoxide and carbon dioxide may be formed. Acute overexposure to the products of combustion may result in irritation of the respiratory tract. Pay attention to the corrosive effects arising from contact

with water.

Special protective equipment and precautions for firefighters

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 selfcontained 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: Avoid contact with eyes, skin, and clothing. Use only in well-ventilated areas. Avoid accidental ingestion of this material. Wash hands and face before eating, drinking, smoking, using toilet facilities, or applying cosmetics.

Remove contact lenses before using sealant. Do not handle lenses until all sealant has been cleaned from the finger and hands. Keep out of reach of children. Keep container closed. 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.

7. Handling and storage

Precautions for safe handling:

Sensitivity to static discharge is not expected. 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.

Conditions for safe storage, including any incompatibilities:

Keep container tightly closed in a cool, well-ventilated place.

8. Exposure controls/personal protection

Control Parameters

Occupational Exposure Limits

Chemical Identity	Туре	Exposure Limit Values	Source
Silane, dichlorodimethyl-, reaction products with silica	TWA	0.8 mg/m3	US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (03 2016)
	TWA	20 millions of particles per cubic foot of air	US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (03 2016)
Silane, dichlorodimethyl-, reaction products w ith silica - Particulate.	ST ESL	27 μg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended (06 2018)
Octamethylcyclotetrasiloxane	TWA	5 ppm	
Octamethylcyclotetrasiloxane - Vapor.	ST ESL	1,000 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended (11 2016)
	AN ESL	100 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended (11 2016)

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Octamethylcyclotetrasiloxane	TWA	10 ppm	US. OARS. WEELs Workplace Environmental
Octamenty by clotten as no varie	100	ιο ρριιι	OS. OATO. WILLS WOTKPIACE LIVITOTITIETILAT
			Exposure Level Guide, as amended (2014)
			Exposure Level Calde, as amonasa (2011)

Appropriate Engineering

Controls

Provide adequate general and local exhaust ventilation. Eye washes and

showers for emergency use.

Individual protection measures, such as personal protective equipment

General information: Ventilation and other forms of engineering controls are preferred for

controlling exposures. Respiratory protection may be needed for non-

routine or emergency situations.

Eye/face protection: Safety glasses with side shields

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: Black
Odor: Acetic acid.

Odor threshold:

pH:

Not applicable

Melting point/freezing point:

Initial boiling point and boiling range:

Not applicable

Not applicable

Flash Point: > 93.3 °C (estimated)

Evaporation rate: < 1

Flammability (solid, gas): No data available.

Upper/lower limit on flammability or explosive limits

Flammability limit - upper (%):

Flammability limit - lower (%):

Explosive limit - upper:

No data available.

No data available.

No data available.

No data available.

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Heat of combustion:No data available.

Vapor pressure: No data available.

Vapor density:No data available.Density:ca. 1.06 g/cm3

Relative density: ca. 1.06

Solubility(ies)

Solubility in water: Insoluble

Solubility (other):

Partition coefficient (n-octanol/water) Log

No data available.

No data available.

Pow:

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: 26 g/l ;

10. Stability and reactivity

Reactivity: No dangerous reaction if used as recommended.

Chemical Stability: Material is stable under normal conditions.

Possibility of hazardous

reactions:

Hazardous polymerization does not occur.

Conditions to avoid: Keep away from moisture. Reacts with water liberating small amounts of

acetic acid.

Incompatible Materials: None known.

Hazardous Decomposition

Products:

Carbon dioxide 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.

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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:

ATEmix: 8,950.95 mg/kg

Specified substance(s):

Octamethylcyclotetrasilox LD

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

ane

Dermal

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

Specified substance(s):

Octamethylcyclotetrasilox

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

an

Inhalation

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

Specified substance(s):

Octamethylcyclotetrasilox

LC50 (Rat): 36 mg/l

ane

Repeated dose toxicity

Product: No data available.

Skin Corrosion/Irritation

Product: No data available.

Serious Eye Damage/Eye Irritation

Product: No data available.

Respiratory or Skin Sensitization

Product: No data available.

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Carcinogenicity

Product: No data available.

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:

No carcinogenic components identified

US. National Toxicology Program (NTP) Report on Carcinogens:

No carcinogenic components identified

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050), as amended:

No carcinogenic components identified

Germ Cell Mutagenicity

In vitro

Product: No data available.

Specified substance(s):

Octamethylcyclotetrasilox Ames-Test (OECD-Guideline 471 (Genetic Toxicology: Salmonella

ane typhimurium, Reverse Mutation Assay)): negative (not mutagenic)

Mouse Lymphoma Assay (OECD Guidline 476): negative (not mutagenic)

In vivo

Product: No data available.

Specified substance(s):

Octamethylcyclotetrasilox Chromosomal aberration (OECD-Guideline 474 (Genetic Toxicology:

Micronucleus Test)) Inhalation (Rat, male and female): negative

Reproductive toxicity

ane

Product: No data available.

Specific Target Organ Toxicity - Single Exposure

Product: No data available.

Specific Target Organ Toxicity - Repeated Exposure

Product: No data available.

Aspiration Hazard

Product: No data available.

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Other effects:

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.

Aquatic Invertebrates

Product: No data available.

Chronic hazards to the aquatic environment:

Fish

Product: No data available.

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Aquatic Invertebrates

Product: No data available.

Toxicity to Aquatic Plants

Product: No data available.

Persistence and Degradability

Biodegradation

Product: No data available.

Specified substance(s):

Octamethylcyclotetrasilox 3.7 % (29 d, 310 Ready Biodegradability - CO₂ in Sealed Vessels

ane (Headspace Test)) Not readily biodegradable.

BOD/COD Ratio

Product: No data available.

Bioaccumulative potential

Bioconcentration Factor (BCF)

Product: No data available.

Specified substance(s):

Octamethylcyclotetrasilox Fathead Minnow, Bioconcentration Factor (BCF): 12.40

ane

Partition Coefficient n-octanol / water (log Kow)
Product:
No data available.

Mobility in soil: No data available.

Known or predicted distribution to environmental compartments

Silane, dichlorodimethyl-, No data available.

reaction products with silica

Octamethylcyclotetrasiloxa No data available.

ne

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.

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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.

IMDG

Not regulated.

IATA

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.

15. Regulatory information

US Federal Regulations

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

<u>Chemical Identity</u> <u>Reportable quantity</u>

ane One-Time Export Notification only.

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

None present or none present in regulated quantities.

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US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050), as amended

Chemical Identity OSHA hazard(s) Dimethylpolysiloxane No OSHA Hazards

Silane, dichlorodimethyl-,

No OSHA Hazards

reaction products with

silica

Siloxanes and Silicones,

No OSHA Hazards

di-Me hydroxy terminated

Siloxanes and Silicones, di-Me, polymers with Me silsesquioxanes, hydroxyNo OSHA Hazards

terminated

Octamethylcyclotetrasilox

Systemic effects

Polydimethylsiloxane No OSHA Hazards

Iron oxide Causes mild skin irritation.; Respiratory hazard.

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

SARA 302 Extremely Hazardous Substance

None present or none present in regulated quantities.

SARA 304 Emergency Release Notification

None present or none present in regulated quantities.

SARA 311/312 Hazardous Chemical

Chemical Identity Threshold Planning Quantity

US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 313 Toxic Chemicals (40 CFR 372.65) - Supplier Notification Required

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.

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

Dimethylpolysiloxane

Silane, dichlorodimethyl-, reaction products with silica

Siloxanes and Silicones, di-Me hydroxy terminated

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

hydroxy-terminated

Methyltriacetoxysilane

US. Massachusetts RTK - Substance List

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

US. Pennsylvania RTK - Hazardous Substances

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

US. Rhode Island RTK

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

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Inventory Status:

Australia AICS:	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.
EINECS, ELINCS or NLP:	On or in compliance with the inventory	Remarks: None.
Japan (ENCS) List:	On or in compliance with the inventory	Remarks: None.
China Inv. Existing Chemical Substances:	On or in compliance with the inventory	Remarks: None.
Korea Existing Chemicals Inv. (KECI):	On or in compliance with the inventory	Remarks: None.
Canada NDSL Inventory:	Not in compliance with the inventory.	Remarks: None.
Philippines PICCS:	On or in compliance with the inventory	Remarks: None.
US TSCA Inventory:	On or in compliance with the inventory	Remarks: None.
New Zealand Inventory of Chemicals:	On or in compliance with the inventory	Remarks: None.
Taiwan Chemical Substance Inventory:	On or in compliance with the inventory	Remarks: None.
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 PROTECTI	ON	

Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe; RNP - Rating not

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possible; *Chronic health effect

Issue Date: 10/07/2020

Revision Date: No data available.

Version #: 5.0

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 ofour knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safehandling, 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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RTV 106

SAFETY DATA SHEET

1. Identification

Product identifier: RTV 106

Other means of identification

Synonyms: ACETOXY SEALANT (red)

Recommended use and restriction on use

Recommended use: Silicone Elastomer **Restrictions on use:** For industrial use only.

Manufacturer/Importer/Distr :

ibutor Information

Momentive Performance Materials LLC

260 Hudson River Road Waterford NY 12188

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

Unknown toxicity - Health

Acute toxicity, oral	0.48 %
Acute toxicity, dermal	0.48 %
Acute toxicity, inhalation, vapor	0.48 %
Acute toxicity, inhalation, dust or mist	0.48 %

Label Elements

Hazard Symbol:

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Signal Word: Warning

Hazard Statement: H361; Suspected of damaging fertility or the unborn child.

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 appropriate treatment and disposal

facility in accordance with applicable laws and regulations, and product

characteristics at time of disposal.

Other hazards which do not result in GHS classification:

None.

Substance(s) formed under the

conditions of use:

Generates acetic acid during cure.

3. Composition/information on ingredients

Mixtures

Chemical Identity	CAS number	Content in percent (%)*	Notes
Red iron oxide	1309-37-1	1 - <5%	# This substance has workplace exposure limit(s).
Octamethylcyclotetrasiloxane	556-67-2	1 - <3%	# This substance has workplace exposure limit(s).

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

4. First-aid measures

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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. Do not give

victim anything to drink if he is unconscious. Get medical attention.

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.

Skin Contact: Wash with soap and water.

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: None known.

Hazards: No data available.

Indication of immediate medical attention and special treatment needed

Treatment: Treatment is symptomatic and supportive.

5. Fire-fighting measures

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

involved materials. Prevent runoff from fire control or dilution from entering

streams, sewers, or drinking water supply.

Suitable (and unsuitable) extinguishing media

Suitable extinguishing

media:

All standard extinguishing agents are suitable.

Unsuitable extinguishing

media:

Do not use water jet.

Specific hazards arising from

the chemical:

In case of fire, carbon monoxide and carbon dioxide may be formed. Acute overexposure to the products of combustion may result in irritation of the respiratory tract. Pay attention to the corrosive effects arising from contact

with water.

Special protective equipment and precautions for firefighters

Special fire fighting

procedures:

Use water spray to keep fire-exposed containers cool.

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Special protective equipment for fire-fighters:

Firefighters must wear NIOSH/MSHA approved positive pressure selfcontained breathing apparatus with full face mask and full protective clothing.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures: Avoid contact with eyes, skin, and clothing. Use only in well-ventilated areas. Avoid accidental ingestion of this material. Wash hands and face before eating, drinking, smoking, using toilet facilities, or applying cosmetics.

Remove contact lenses before using sealant. Do not handle lenses until all sealant has been cleaned from the finger and hands. Keep out of reach of children. Keep container closed. 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.

7. Handling and storage

Precautions for safe handling:

Sensitivity to static discharge is not expected. 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.

Conditions for safe storage, including any incompatibilities:

Keep container tightly closed in a cool, well-ventilated place.

8. Exposure controls/personal protection

Control Parameters

Occupational Exposure Limits

Chemical Identity	Туре	Exposure Limit Values	Source
Red iron oxide - Respirable fraction.	TWA	5 mg/m3	US. ACGIH Threshold Limit Values, as amended (03 2015)
Red iron oxide - Dust and fume as Fe	REL	5 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards, as amended (2010)
Red iron oxide - Fume.	PEL	10 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended (02 2006)
	TWA	10 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000),

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			as amended (1989)
	TWA	10 mg/m3	US. Tennessee. OELs. Occupational Exposure
			Limits, Table Z1A, as amended (06 2008)
	TWA PEL	5 mg/m3	US. California Code of Regulations, Title 8,
		_	Section 5155. Airborne Contaminants, as
			amended (01 2015)
Red iron oxide - Total dust.	TWA	50 millions of	US. OSHA Table Z-3 (29 CFR 1910.1000), as
		particles per	amended (03 2016)
		cubic foot of	, , , , , , , , , , , , , , , , , , , ,
		air	
Red iron oxide - Respirable	TWA	5 mg/m3	US. OSHA Table Z-3 (29 CFR 1910.1000), as
fraction.		5g6	amended (03 2016)
Hacton.	TWA	15 millions of	US. OSHA Table Z-3 (29 CFR 1910.1000), as
	1447	particles per	amended (03 2016)
		cubic foot of	arriended (03 20 10)
		air	
Dad inan avida. Tatal duat	TWA		LIC OCUA Table 7 2/20 CED 4040 4000\
Red iron oxide - Total dust.	IVVA	15 mg/m3	US. OSHA Table Z-3 (29 CFR 1910.1000), as
B 11	ID	0.500	amended (03 2016)
Red iron oxide	IDLH	2,500 mg/m3	US. NIOSH. Immediately Dangerous to Life or
			Health (IDLH) Values, as amended (10 2017)
Octamethylcyclotetrasiloxane	TWA	5 ppm	
Octamethylcyclotetrasiloxane	ST ESL	1,000 µg/m3	US. Texas. Effects Screening Levels (Texas
- Vapor.		· -	Commission on Environmental Quality), as
			amended (11 2016)
	AN ESL	100 µg/m3	US. Texas. Effects Screening Levels (Texas
		1.0	Commission on Environmental Quality), as
			amended (11 2016)
Octamethylcyclotetrasiloxane	TWA	10 ppm	US. OARS. WEELs Workplace Environmental
			Exposure Level Guide, as amended (2014)

Appropriate Engineering Controls

Provide adequate general and local exhaust ventilation. Eye washes and

showers for emergency use.

Individual protection measures, such as personal protective equipment

General information: Ventilation and other forms of engineering controls are preferred for

controlling exposures. Respiratory protection may be needed for non-

routine or emergency situations.

Eye/face protection: Safety glasses with side shields

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.

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9. Physical and chemical properties

Appearance

Physical state:solidForm:PasteColor:Red

Odor: Acetic acid.

Odor threshold:

pH:

Not applicable

Melting point/freezing point:

Initial boiling point and boiling range:

Not applicable

Flash Point: > 93.3 °C (estimated)

Evaporation rate: < 1

Flammability (solid, gas): No data available.

Upper/lower limit on flammability or explosive limits

Flammability limit - upper (%):

Flammability limit - lower (%):

Explosive limit - upper:

Explosive limit - lower:

No data available.

Vapor pressure: Not applicable

Vapor density:

Not applicable

1.06 g/cm3 (23 °C)

Relative density: ca. 1.06

Solubility(ies)

Solubility in water: Insoluble
Solubility (other): Toluene

Partition coefficient (n-octanol/water) Log No

Pow:

er) Log No data available.

Auto-ignition temperature:Not applicableDecomposition temperature:No data available.SADT:No data available.Viscosity, dynamic:No data available.Viscosity, kinematic:No data available.

VOC: 26 g/l ;

10. Stability and reactivity

Reactivity: Reacts with water.

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Chemical Stability: Material is stable under normal conditions.

Possibility of hazardous

reactions:

Hazardous polymerization does not occur.

Conditions to avoid: Keep away from moisture. Reacts with water liberating small amounts of

acetic acid.

Incompatible Materials: Strong Acids, Strong Bases Water.

Hazardous Decomposition

Products:

Carbon dioxide 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.

Generates acetic acid during cure.

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: ATEmix: 11,363.64 mg/kg

Specified substance(s):

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

ane

Dermal

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

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Specified substance(s):

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

ane

Inhalation

ane

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

Specified substance(s):

Octamethylcyclotetrasilox

LC50 (Rat): 36 mg/l

Repeated dose toxicity

Product: No data available.

Skin Corrosion/Irritation

Product: No data available.

Serious Eye Damage/Eye Irritation

Product: No data available.

Specified substance(s):

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

Respiratory or Skin Sensitization

Product: No data available.

Carcinogenicity

Product: No data available.

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:

No carcinogenic components identified

US. National Toxicology Program (NTP) Report on Carcinogens:

No carcinogenic components identified

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050), as amended:

No carcinogenic components identified

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Germ Cell Mutagenicity

In vitro

Product: No data available.

Specified substance(s):

Octamethylcyclotetrasilox

ane

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

Mouse Lymphoma Assay (OECD Guidline 476): negative (not mutagenic)

In vivo

Product: No data available.

Specified substance(s):

Octamethylcyclotetrasilox

ane

Chromosomal aberration (OECD-Guideline 474 (Genetic Toxicology:

Micronucleus Test)) Inhalation (Rat, male and female): negative

Reproductive toxicity

Product: No data available.

Specific Target Organ Toxicity - Single Exposure

Product: No data available.

Specific Target Organ Toxicity - Repeated Exposure

Product: No data available.

Aspiration Hazard

Product: No data available.

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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.

Aquatic Invertebrates

Product: No data available.

Chronic hazards to the aquatic environment:

Fish

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Product: No data available.

Aquatic Invertebrates

Product: No data available.

Toxicity to Aquatic Plants

Product: No data available.

Persistence and Degradability

Biodegradation

Product: No data available.

Specified substance(s):

Octamethylcyclotetrasilox 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)

Product: No data available.

Specified substance(s):

Octamethylcyclotetrasilox Fathead Minnow, Bioconcentration Factor (BCF): 12.40

ane

Partition Coefficient n-octanol / water (log Kow)
Product:
No data available.

Mobility in soil: No data available.

Known or predicted distribution to environmental compartments

Red iron oxide No data available. Octamethylcyclotetrasiloxa No data available.

ne

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.

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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.

IMDG

Not regulated.

IATA

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. Keep away from foodstuffs and animal feed. keep away from odour sensitive materials Protect from moisture.

15. Regulatory information

US Federal Regulations

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

<u>Chemical Identity</u> <u>Reportable quantity</u>

ane One-Time Export Notification only.

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

SARA 302 Extremely Hazardous Substance

None present or none present in regulated quantities.

SARA 304 Emergency Release Notification

None present or none present in regulated quantities.

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SARA 311/312 Hazardous Chemical

<u>Chemical Identity</u> <u>Threshold Planning Quantity</u>

SARA 313 (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

Dimethylpolysiloxane
Siloxanes and Silicones, di-Me hydroxy terminated
Treated Fumed Silica
Siloxanes and Silicones, di-Me, polymers with Me silsesquioxanes, hydroxy-terminated
Methyltriacetoxysilane
Red iron oxide

US. Massachusetts RTK - Substance List

Chemical Identity

Red iron oxide

US. Pennsylvania RTK - Hazardous Substances

Chemical Identity

Red iron oxide

US. Rhode Island RTK

Chemical Identity

Red iron oxide

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Inventory Status:

iveritory Status.		
Australia AICS:	On or in compliance with the inventory	Remarks: None.
EINECS, ELINCS or NLP:	On or in compliance with the inventory	Remarks: None.
Japan (ENCS) List:	On or in compliance with the inventory	Remarks: None.
China Inv. Existing Chemical Substances:	On or in compliance with the inventory	Remarks: None.
Korea Existing Chemicals Inv. (KECI):	On or in compliance with the inventory	Remarks: None.
Canada NDSL Inventory:	Not in compliance with the inventory.	Remarks: None.
Philippines PICCS:	On or in compliance with the inventory	Remarks: None.
US TSCA Inventory:	On or in compliance with the inventory	Remarks: None.
New Zealand Inventory of Chemicals:	On or in compliance with the inventory	Remarks: None.
Taiwan Chemical Substance	On or in compliance with the	Remarks: None.
Inventory:	inventory	
Canada DSL Inventory List:	Q (quantity restricted)	Remarks: Please contact your supplier for further information on the inventory status of this material.

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

Issue Date: 05/11/2020

Revision Date: No data available.

Version #: 4.3

Further Information: No data available.

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RTV 106

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 ofour knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safehandling, 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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RTV 108

SAFETY DATA SHEET

1. Identification

Product identifier: RTV 108

Other means of identification

Synonyms: ACETOXY SEALANT (translucent)

Recommended use and restriction on use

Recommended use: Silicone Elastomer **Restrictions on use:** For industrial use only.

Manufacturer/Importer/Distr :

ibutor Information

Momentive Performance Materials - Daytona

703 South Street

New Smyrna Beach FL 32168

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:

Generates acetic acid during cure.

3. Composition/information on ingredients

Mixtures

Chemical Identity	CAS number	Content in percent (%)*	Notes
Silica	Trade secret	10 - <20%	# This substance has workplace exposure limit(s).
Octamethylcyclotetrasiloxane	556-67-2	1 - <3%	# This substance has workplace exposure limit(s).

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

Trade secret information: ** A specific chemical identity and/or percentage of composition has been

withheld as a trade secret.

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. Do not give

victim anything to drink if he is unconscious. Get medical attention.

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RTV 108

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.

Skin Contact: Wash with soap and water.

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: None known.

Hazards: No data available.

Indication of immediate medical attention and special treatment needed

Treatment: Treatment is symptomatic and supportive.

5. Fire-fighting measures

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

involved materials. Prevent runoff from fire control or dilution from entering

streams, sewers, or drinking water supply.

Suitable (and unsuitable) extinguishing media

Suitable extinguishing

media:

All standard extinguishing agents are suitable.

Unsuitable extinguishing

media:

Do not use water jet.

Specific hazards arising from

the chemical:

In case of fire, carbon monoxide and carbon dioxide may be formed. Acute overexposure to the products of combustion may result in irritation of the respiratory tract. Pay attention to the corrosive effects arising from contact

with water.

Special protective equipment and precautions for firefighters

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 selfcontained 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: Avoid contact with eyes, skin, and clothing. Use only in well-ventilated areas. Avoid accidental ingestion of this material. Wash hands and face before eating, drinking, smoking, using toilet facilities, or applying cosmetics.

Remove contact lenses before using sealant. Do not handle lenses until all sealant has been cleaned from the finger and hands. Keep out of reach of children. Keep container closed. 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.

7. Handling and storage

Precautions for safe handling:

Sensitivity to static discharge is not expected. 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.

Conditions for safe storage, including any incompatibilities:

Keep container tightly closed in a cool, well-ventilated place.

8. Exposure controls/personal protection

Control Parameters

Occupational Exposure Limits

Chemical Identity	Туре	Exposure Limit Values	Source
Silica	TWA	0.8 mg/m3	US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (03 2016)
	TWA	20 millions of particles per cubic foot of air	US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (03 2016)
Octamethylcyclotetrasiloxane	TWA	5 ppm	
Octamethylcyclotetrasiloxane - Vapor.	ST ESL	1,000 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended (11 2016)
	AN ESL	100 μg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended (11 2016)
Octamethylcyclotetrasiloxane	TWA	10 ppm	US. OARS. WEELs Workplace Environmental Exposure Level Guide, as amended (2014)

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RTV 108

Appropriate Engineering

Controls

Provide adequate general and local exhaust ventilation. Eye washes and

showers for emergency use.

Individual protection measures, such as personal protective equipment

General information: Ventilation and other forms of engineering controls are preferred for

controlling exposures. Respiratory protection may be needed for non-

routine or emergency situations.

Eye/face protection: Safety glasses with side shields

Skin Protection

Hand Protection: Butyl rubber gloves are recommended.

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.Initial boiling point and boiling range:Not applicable

Flash Point: > 93.3 °C (estimated)
Evaporation rate: No data available.
Flammability (solid, gas): No data available.

Upper/lower limit on flammability or explosive limits

Flammability limit - upper (%):

Flammability limit - lower (%):

Explosive limit - upper:

Explosive limit - lower:

No data available.

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Vapor pressure: No data available.

Vapor density:No data available.Density:ca. 1.06 g/cm3

Relative density: 1.06

Solubility(ies)

Solubility in water: Insoluble
Solubility (other): Toluene

Partition coefficient (n-octanol/water) Log

Pow

No data available.

Auto-ignition temperature: No data available.

Decomposition temperature: No decomposition if stored and applied as directed.

SADT: No data available.

Viscosity, dynamic: No data available.

Viscosity, kinematic: > 20.5 mm2/s (40 °C)

VOC: 26 g/l;

10. Stability and reactivity

Reactivity: No dangerous reaction if used as recommended.

Chemical Stability: Material is stable under normal conditions.

Possibility of hazardous

reactions:

Hazardous polymerization does not occur.

Conditions to avoid: Keep away from moisture.

Incompatible Materials: Strong Acids, Strong Bases Water.

Hazardous Decomposition

Products:

Carbon dioxide Silicon dioxide. Formaldehyde. Generates acetic acid

during cure. 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.

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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: ATEmix: 8,608.82 mg/kg

Specified substance(s):

Octamethylcyclotetrasilox

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

and

Dermal

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

Specified substance(s):

Octamethylcyclotetrasilox

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

ane

Inhalation

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

Specified substance(s):

Octamethylcyclotetrasilox

ane

LC50 (Rat): 36 mg/l

Repeated dose toxicity

Product: NOAEL (Rat(male and female), Inhalation(vapour)): 150 mg/kg

NOAEL (Rabbit(male and female), Dermal): > 1 mg/kg

Skin Corrosion/Irritation

Product: No data available.

Specified substance(s):

Octamethylcyclotetrasil

OECD-Guideline 404 (Acute Dermal Irritation/Corrosion) (Rabbit): Slightly

oxane irritating.

Serious Eye Damage/Eye Irritation

Product: No data available.

Specified substance(s):

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

oxane

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Respiratory or Skin Sensitization

Product: No data available.

Carcinogenicity

Product: No data available.

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:

No carcinogenic components identified

US. National Toxicology Program (NTP) Report on Carcinogens:

No carcinogenic components identified

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050), as amended:

No carcinogenic components identified

Germ Cell Mutagenicity

In vitro

Product: Ames-Test (OECD-Guideline 471 (Genetic Toxicology: Salmonella

typhimurium, Reverse Mutation Assay)): negative (not mutagenic)

Mouse Lymphoma Assay (OECD Guidline 476): negative (not mutagenic)

In vivo

Product: Chromosomal aberration (OECD-Guideline 474 (Genetic Toxicology:

Micronucleus Test)): negative

Reproductive toxicity

Product: No data available.

Specific Target Organ Toxicity - Single Exposure

Product: No data available.

Specific Target Organ Toxicity - Repeated Exposure

Product: No data available.

Aspiration Hazard

Product: No data available.

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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. Contains dibutyltin compound(s) - May impair fertility. May cause harm to unborn child.

12. Ecological information

Ecotoxicity:

Acute hazards to the aquatic environment:

Fish

Product: No data available.

Aquatic Invertebrates

Product: EC50 (Daphnia magna, 48 h): > 0.015 mg/l

Chronic hazards to the aquatic environment:

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Fish

Product: LC50 (Oncorhynchus mykiss, 14 d): 0.01 mg/l

Aquatic Invertebrates

Product: EC50 (Daphnia magna, 21 d): > 0.015 mg/l

Toxicity to Aquatic Plants

Product: No data available.

Persistence and Degradability

Biodegradation

Product: No data available.

Specified substance(s):

Octamethylcyclotetrasilox 3.7 % (29 d, 310 Ready Biodegradability - CO₂ in Sealed Vessels

ane (Headspace Test)) Not readily biodegradable.

BOD/COD Ratio

Product: No data available.

Bioaccumulative potential

Bioconcentration Factor (BCF)

Product: No data available.

Specified substance(s):

Octamethylcyclotetrasilox Fathead Minnow, Bioconcentration Factor (BCF): 12.40

ane

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.
Octamethylcyclotetrasiloxa No data available.

ne

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.

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Contaminated Packaging: Dispose of as unused product.

14. Transport information

DOT

Not regulated.

IMDG

Not regulated.

IATA

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.

15. Regulatory information

US Federal Regulations

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

Chemical Identity Reportable quantity

ane One-Time Export Notification only.

US. Toxic Substances Control Act (TSCA) Section 5(a)(2) Final 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 1910.1001-1050), as amended

<u>Chemical Identity</u> Dimethylpolysiloxane	OSHA hazard(s) No OSHA Hazards
Silica	No OSHA Hazards
Siloxanes and Silicones, di-Me hydroxy terminated	No OSHA Hazards
Siloxanes and Silicones, di-Me, polymers with Me silsesquioxanes, hydroxy- terminated	No OSHA Hazards
Octamethylcyclotetrasilox ane	Systemic effects

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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

Delayed (Chronic) Health Hazard

SARA 302 Extremely Hazardous Substance

None present or none present in regulated quantities.

SARA 304 Emergency Release Notification

None present or none present in regulated quantities.

SARA 311/312 Hazardous Chemical

<u>Chemical Identity</u> <u>Threshold Planning Quantity</u>

US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 313 Toxic Chemicals (40 CFR 372.65) - Supplier Notification Required

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

Dimethylpolysiloxane

Siloxanes and Silicones, di-Me hydroxy terminated

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

hydroxy-terminated

Methyltriacetoxysilane

Silica:

US. Massachusetts RTK - Substance List

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

US. Pennsylvania RTK - Hazardous Substances

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

US. Rhode Island RTK

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

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Inventory Status:

Australia AICS:	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.
EINECS, ELINCS or NLP:	On or in compliance with the inventory	Remarks: None.
Japan (ENCS) List:	On or in compliance with the inventory	Remarks: None.
China Inv. Existing Chemical Substances:	On or in compliance with the inventory	Remarks: None.
Korea Existing Chemicals Inv. (KECI):	On or in compliance with the inventory	Remarks: None.
Canada NDSL Inventory:	Not in compliance with the inventory.	Remarks: None.
Philippines PICCS:	On or in compliance with the inventory	Remarks: None.
US TSCA Inventory:	On or in compliance with the inventory	Remarks: None.
New Zealand Inventory of Chemicals:	On or in compliance with the inventory	Remarks: None.
Taiwan Chemical Substance Inventory:	On or in compliance with the inventory	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

Issue Date: 06/15/2021

Revision Date: No data available.

Version #: 4.3

Further Information: No data available.

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Revision Date: 06/15/2021

RTV 108

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 ofour knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safehandling, 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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Revision Date: 07/07/2017

RTV109-ALUM

SAFETY DATA SHEET

1. Identification

Product identifier: RTV109-ALUM

Other means of identification

Synonyms: ACETOXY SEALANT (Aluminium)

Recommended use and restriction on use

Recommended use: Silicone Elastomer **Restrictions on use:** For industrial use only.

Manufacturer/Importer/Distr :

ibutor Information

Momentive Performance Materials LLC

260 Hudson River Road Waterford NY 12188

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

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RTV109-ALUM

Hazard Statement: H361; Suspected of damaging fertility or the unborn child.

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 appropriate treatment and disposal

facility in accordance with applicable laws and regulations, and product

characteristics at time of disposal.

Other hazards which do not result in GHS classification:

None.

Substance(s) formed under the

conditions of use:

Generates acetic acid during cure.

3. Composition/information on ingredients

Mixtures

Chemical Identity	CAS number	Content in percent (%)*	Notes
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.

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. Do not give

victim anything to drink if he is unconscious. Get medical attention.

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.

Skin Contact: Wash with soap and water.

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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: None known.

Hazards: No data available.

Indication of immediate medical attention and special treatment needed

Treatment: Treatment is symptomatic and supportive.

5. Fire-fighting measures

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

involved materials. Prevent runoff from fire control or dilution from entering

streams, sewers, or drinking water supply.

Suitable (and unsuitable) extinguishing media

Suitable extinguishing

media:

All standard extinguishing agents are suitable.

Unsuitable extinguishing

media:

Do not use water jet.

Specific hazards arising from

the chemical:

In case of fire, carbon monoxide and carbon dioxide may be formed. Acute overexposure to the products of combustion may result in irritation of the respiratory tract. Pay attention to the corrosive effects arising from contact

with water.

Special protective equipment and precautions for firefighters

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: Avoid contact with eyes, skin, and clothing. Use only in well-ventilated areas. Avoid accidental ingestion of this material. Wash hands and face before eating, drinking, smoking, using toilet facilities, or applying cosmetics.

Remove contact lenses before using sealant. Do not handle lenses until all sealant has been cleaned from the finger and hands. Keep out of reach of children. Keep container closed. 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.

7. Handling and storage

Precautions for safe handling:

Sensitivity to static discharge is not expected. 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.

Conditions for safe storage, including any incompatibilities:

Keep container tightly closed in a cool, well-ventilated place.

8. Exposure controls/personal protection

Control Parameters

Occupational Exposure Limits

Chemical Identity	Туре	Exposure Limit Values	Source
Octamethylcyclotetrasiloxane	TWA	5 ppm	

Appropriate Engineering Controls

Provide adequate general and local exhaust ventilation. Eye washes and showers for emergency use.

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Individual protection measures, such as personal protective equipment

General information: Ventilation and other forms of engineering controls are preferred for

controlling exposures. Respiratory protection may be needed for non-

routine or emergency situations.

Eye/face protection: Safety glasses with side shields

Skin Protection

Hand Protection: Butyl rubber gloves are recommended.

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

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).

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: Dark gray
Odor: Acetic acid.

Odor threshold:

pH:

not applicable

not applicable

not applicable

not applicable

not applicable

not applicable

Flash Point: > 93.3 °C (estimated)
Evaporation rate: No data available.
Flammability (solid, gas): No data available.

Upper/lower limit on flammability or explosive limits

Flammability limit - upper (%):

Flammability limit - lower (%):

Explosive limit - upper (%):

No data available.

No data available.

Explosive limit - lower (%):

No data available.

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Heat of combustion:No data available.

Vapor pressure: not applicable

Vapor density:No data available.Density:ca. 1.06 g/cm3Relative density:ca. 1.06

Solubility(ies)

Solubility in water: Insoluble
Solubility (other): Toluene

Partition coefficient (n-octanol/water) Log

Pow:

Auto-ignition temperature: not applicable

Decomposition temperature: No data available.

SADT:

No data available.

Viscosity, dynamic:

No data available.

No data available.

No data available.

VOC: 26 g/l ;

10. Stability and reactivity

Reactivity: No dangerous reaction if used as recommended.

Chemical Stability: Material is stable under normal conditions.

Possibility of hazardous

reactions:

Hazardous polymerisation does not occur.

No data available.

Conditions to avoid: Keep away from moisture. Reacts with water liberating small amounts of

acetic acid.

Incompatible Materials: Strong Acids, Strong Bases Water.

Hazardous Decomposition

Products:

Carbon dioxide 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.

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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):

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

ane

Dermal

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

Specified substance(s):

Octamethylcyclotetrasilox LD 50 (Rat): > 2,400 mg/kg

ane

Inhalation

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

Specified substance(s):

Octamethylcyclotetrasilox LC50 (Rat): 36 mg/l

ane

Repeated dose toxicity

Product: No data available.

Skin Corrosion/Irritation

Product: No data available.

Serious Eye Damage/Eye Irritation

Product: No data available.

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Respiratory or Skin Sensitization

Product: No data available.

Carcinogenicity

Product: No data available.

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:

No carcinogenic components identified

US. National Toxicology Program (NTP) Report on Carcinogens:

No carcinogenic components identified

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050):

No carcinogenic components identified

Germ Cell Mutagenicity

In vitro

Product: No data available.

Specified substance(s):

Octamethylcyclotetrasilox

ane

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

Mouse Lymphoma Assay (OECD Guidline 476): negative (not mutagenic)

In vivo

Product: No data available.

Specified substance(s):

Octamethylcyclotetrasilox (

ane

Chromosomal aberration (OECD-Guideline 474 (Genetic Toxicology: Micronucleus Test)) Inhalation (Rat, male and female): negative

Reproductive toxicity

Product: No data available.

Specific Target Organ Toxicity - Single Exposure

Product: No data available.

Specific Target Organ Toxicity - Repeated Exposure

Product: No data available.

Aspiration Hazard

Product: No data available.

Other effects: No data available.

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Specified substance(s):

Octamethylcyclotetrasil oxane

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 welldocumented 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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Aquatic Invertebrates

Product: No data available.

Chronic hazards to the aquatic environment:

Fish

Product: No data available.

Aquatic Invertebrates

Product: No data available.

Toxicity to Aquatic Plants

Product: No data available.

Persistence and Degradability

Biodegradation

Product: No data available.

Specified substance(s):

Octamethylcyclotetrasilox 3.7 % (29 d, 310 Ready Biodegradability - CO₂ in Sealed Vessels

ane (Headspace Test)) Not readily biodegradable.

BOD/COD Ratio

Product: No data available.

Bioaccumulative potential

Bioconcentration Factor (BCF)

Product: No data available.

Specified substance(s):

Octamethylcyclotetrasilox Fathead Minnow, Bioconcentration Factor (BCF): 12.40

ane

Partition Coefficient n-octanol / water (log Kow)

Product: No data available.

Mobility in soil: No data available.

Known or predicted distribution to environmental compartments

Octamethylcyclotetrasiloxa No data available.

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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.

IMDG

Not regulated.

IATA

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.

15. Regulatory information

US Federal Regulations

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

Chemical Identity Reportable quantity

Octamethylcyclotetrasilox De minimis concentration: TSCA Section: 4: 1.0%

ane One-Time Export Notification only.

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

Delayed (Chronic) Health Hazard

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SARA 302 Extremely Hazardous Substance

None present or none present in regulated quantities.

SARA 304 Emergency Release Notification

None present or none present in regulated quantities.

SARA 311/312 Hazardous Chemical

Chemical Identity Threshold Planning Quantity

Octamethylcyclotetrasiloxa 10000 lbs

ne

SARA 313 (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 regulated by CA Prop 65 present.

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

Chemical Identity

Dimethylpolysiloxane

SILANE, DICHLORODIMETHYL-, REAKTION PRODUCTS WITH

SILICA, Silane, dichlorodimethyl-, reaction products with silica

Siloxanes and Silicones, di-Me hydroxy terminated

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

hydroxy-terminated

Octamethylcyclotetrasiloxane

ALUMINIUM POWDER (PYROPHORIC)

Acetic acid

US. Massachusetts RTK - Substance List

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

US. Pennsylvania RTK - Hazardous Substances

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

US. Rhode Island RTK

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

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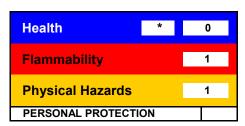
RTV109-ALUM

Inventory Status:

Australia AICS:	y (positive listing)	Remarks: None.
Canada DSL Inventory List:	y (positive listing)	Remarks: None.
EU EINECS List:	y (positive listing)	Remarks: None.
Japan (ENCS) List:	y (positive listing)	Remarks: None.
China Inventory of Existing Chemical Substances:	y (positive listing)	Remarks: None.
Korea Existing Chemicals Inv. (KECI):	y (positive listing)	Remarks: None.
Canada NDSL Inventory:	n (Negative listing)	Remarks: None.
Philippines PICCS:	y (positive listing)	Remarks: None.
US TSCA Inventory:	y (positive listing)	Remarks: None.
New Zealand Inventory of	y (positive listing)	Remarks: None.
Chemicals:		
Taiwan. Taiwan inventory (CSNN):	y (positive listing)	Remarks: None.

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

HMIS Hazard ID



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

Issue Date: 07/07/2017

Revision Date: No data available.

Version #: 4.0

Further Information: No data available.

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Revision Date: 07/07/2017

RTV109-ALUM

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