

SAFETY DATA SHEET

1. Identification

Product identifier: RTV128

Other means of identification

Synonyms: SILICONE RUBBER SEALANT, Silicone Intermediate

Recommended use and restriction on use

Recommended use: Industrial use

Restrictions on use: Not known.

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

Contact person : commercial.services@momentive.com

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

Emergency telephone number

Supplier : CHEMTREC
1-800-424-9300

2. Hazard(s) identification

Hazard Classification

Health Hazards

Toxic to reproduction

Category 1B

Unknown toxicity - Health

Acute toxicity, oral	0 %
Acute toxicity, dermal	0 %
Acute toxicity, inhalation, vapor	0 %
Acute toxicity, inhalation, dust or mist	0 %

Label Elements

Hazard Symbol:

RTV128



Signal Word: Danger

Hazard Statement: H360; May damage 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.

3. Composition/information on ingredients

Mixtures

Chemical Identity	CAS number	Content in percent (%)*	Notes
Hexamethyldisilazane	999-97-3	1 - <5%	No data available.
Octamethylcyclotetrasiloxane	556-67-2	0.1 - <1%	No data available.
Aminoethyl aminopropyl trimethoxy silane	1760-24-3	0.1 - <1%	No data available.
Dibutyltin Diacetate(34% as Tin)	1067-33-0	0.1 - <0.3%	# 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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Ingestion:	If swallowed, do NOT induce vomiting. Give a glass of water.
Inhalation:	If inhaled, remove to fresh air. If not breathing give artificial respiration using a barrier device. If breathing is difficult give oxygen. Get medical attention.
Skin Contact:	To clean from skin, remove completely with a dry cloth or paper towel, before washing with detergent and water. If skin irritation occurs: Get medical advice/attention.
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:	No data available.
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5. Fire-fighting measures

General Fire Hazards:	No data available.
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Suitable (and unsuitable) extinguishing media

Suitable extinguishing media:	All standard extinguishing agents are suitable.
Unsuitable extinguishing media:	No data available.

Specific hazards arising from the chemical:	No data available.
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Special protective equipment and precautions for firefighters

Special fire fighting procedures:	No data available.
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.

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6. Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Use only in well-ventilated areas. Avoid contact with skin and eyes. Keep out of reach of children. Remove contact lenses before using sealant. Do not handle lenses until all sealant has been cleaned from the finger and hands. Keep away from heat, sparks and open flame.

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.

7. Handling and storage

Precautions for safe handling: Sensitivity to static discharge is not expected.

Conditions for safe storage, including any incompatibilities: No data available.

8. Exposure controls/personal protection

Control Parameters

Occupational Exposure Limits

Chemical Identity	Type	Exposure Limit Values	Source
Dibutyltin Diacetate(34% as Tin) - as Sn	STEL	0.2 mg/m ³	US. ACGIH Threshold Limit Values (03 2015)
	TWA	0.1 mg/m ³	US. ACGIH Threshold Limit Values (03 2015)
	REL	0.1 mg/m ³	US. NIOSH: Pocket Guide to Chemical Hazards (2010)
	PEL	0.1 mg/m ³	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
	TWA	0.1 mg/m ³	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)

Appropriate Engineering Controls No data available.

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

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Hand Protection:	Cloth gloves.
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:	No data available.

9. Physical and chemical properties

Appearance

Physical state:	solid
Form:	solid
Color:	Colorless

Odor: No data available.

Odor threshold: No data available.

pH: not applicable

Melting point/freezing point: not applicable

Initial boiling point and boiling range: not applicable

Flash Point: 165.50 °C (Tagliabue Open Cup)

Evaporation rate: No data available.

Flammability (solid, gas): No data available.

Upper/lower limit on flammability or explosive limits

Flammability limit - upper (%): No data available.

Flammability limit - lower (%): No data available.

Explosive limit - upper (%): No data available.

Explosive limit - lower (%): No data available.

Heat of combustion: No data available.

Vapor pressure: Negligible

Vapor density: No data available.

Density: 1,048.50 g/cm³

Relative density: 1.04

Solubility(ies)

Solubility in water: Insoluble

Solubility (other): No data available.

Partition coefficient (n-octanol/water) Log No data available.

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Pow:

Auto-ignition temperature:	not applicable
Decomposition temperature:	No data available.
SADT:	No data available.
Viscosity, dynamic:	No data available.
Viscosity, kinematic:	No data available.
VOC:	38 g/l

10. Stability and reactivity

Reactivity:	No dangerous reaction if used as recommended.
Chemical Stability:	No data available.
Possibility of hazardous reactions:	Hazardous polymerisation does not occur.
Conditions to avoid:	None known.
Incompatible Materials:	None known.
Hazardous Decomposition Products:	Carbon dioxide Formaldehyde. Ammonia. Silicon dioxide.

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.

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Information on toxicological effects

Acute toxicity (list all possible routes of exposure)

Oral

Product:

ATEmix : 37,021.28 mg/kg

Specified substance(s):

Hexamethyldisilazane LD 50 (Rat): 870 mg/kg

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

Aminoethyl aminopropyl trimethoxy silane LD 50 (Rat): 2,995 mg/kg

Dermal

Product:

ATEmix : 12,765.96 mg/kg

Specified substance(s):

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

Aminoethyl aminopropyl trimethoxy silane LD 50 (Rabbit): > 2,000 mg/kg

Dibutyltin Diacetate(34% as Tin) LD 50 (Rabbit): 2,318 mg/kg

Inhalation

Product:

ATEmix : 468.09 mg/l

Specified substance(s):

Octamethylcyclotetrasiloxane LC50 (Rat): 36 mg/l

Repeated dose toxicity

Product:

No data available.

Specified substance(s):

Aminoethyl aminopropyl trimethoxy silane NOAEL (Rat, Oral, 28 d): >= 500 mg/kg

Skin Corrosion/Irritation

Product:

No data available.

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Specified substance(s):

Octamethylcyclotetrasiloxane OECD-Guideline 404 (Acute Dermal Irritation/Corrosion) (Rat): No skin irritation

Specified substance(s):

Aminoethyl
aminopropyl trimethoxy
silane OECD Test Guideline 404 (Rabbit): No skin irritation

Serious Eye Damage/Eye Irritation

Product: No data available.

Specified substance(s):

Aminoethyl
aminopropyl trimethoxy
silane OECD Test Guideline 405 (Rabbit): Strongly irritating.

Respiratory or Skin Sensitization

Product: No data available.

Specified substance(s):

Octamethylcyclotetrasiloxane , OECD-Guideline 406 (Skin Sensitisation) (Guinea Pig) Not sensitizing

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

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Germ Cell Mutagenicity

In vitro

Product: No data available.

Specified substance(s):

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

In vivo

Product: No data available.

Specified substance(s):

Octamethylcyclotetrasiloxane
Chromosomal aberration (OECD-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.

RTV128**Other effects:**

This product contains methylpolysiloxanes which can generate formaldehyde at approximately 300 degrees Fahrenheit (150°C) and above, in atmospheres which contain oxygen. Formaldehyde is a skin and respiratory sensitizer, eye and throat irritant, acute toxicant, and potential cancer hazard. A MSDS for formaldehyde is available from Momentive. ,Ammonia released during curing. Contains dibutyltin compound(s) - May impair fertility. May cause harm to unborn child.

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:**

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Fish

Product: No data available.

Specified substance(s):

Aminoethyl aminopropyl trimethoxy silane LC50 (Lepomis macrochirus): > 100 mg/l

Aquatic Invertebrates

Product: No data available.

Specified substance(s):

Aminoethyl aminopropyl trimethoxy silane EC50 (Daphnia magna, 48 h): 87.4 mg/l

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.

Specified substance(s):

Aminoethyl aminopropyl trimethoxy silane EC50 (Algae (Pseudokirchneriella subcapitata), 96 h): 8.8 mg/l
NOEC (Algae (Pseudokirchneriella subcapitata)): 3.1 mg/l

Persistence and Degradability

Biodegradation

Product: No data available.

Specified substance(s):

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

BOD/COD Ratio

Product: No data available.

Bioaccumulative potential

Bioconcentration Factor (BCF)

Product: No data available.

Specified substance(s):

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Octamethylcyclotetrasiloxane Fathead Minnow, Bioconcentration Factor (BCF): 12.40

Partition Coefficient n-octanol / water (log Kow)

Product: No data available.

Mobility in soil: No data available.

Known or predicted distribution to environmental compartments

Hexamethyldisilazane No data available.

Octamethylcyclotetrasiloxane No data available.

Aminoethyl aminopropyl No data available.

trimethoxy silane

Dibutyltin Diacetate(34% as No data available.

Tin)

Other adverse effects: No data available.

13. Disposal considerations

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

Contaminated Packaging: No data available.

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

SDS_US

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

None present or none present in regulated quantities.

CERCLA Hazardous Substance List (40 CFR 302.4):

None present or none present in regulated quantities.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

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>
Hexamethyldisilazane	10000 lbs
Octamethylcyclotetrasiloxane	10000 lbs
Aminoethyl aminopropyl trimethoxy silane	10000 lbs
Dibutyltin Diacetate(34% as Tin)	10000 lbs

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

This product contains chemical(s) known to the State of California to cause cancer and/or to cause birth defects or other reproductive harm.

Methanol

Maximum Allowable Dose Level
(MADL): 47000 µg/day.
Developmental toxin.

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

Chemical Identity

METHYLPOLYSILOXANE

RTV128

Treated Fumed Silica
Polydimethylsiloxane
Siloxanes and Silicones, di-Me, polymers with Me silsesquioxanes,
hydroxy-terminated
Hexamethyldisilazane
Octamethylcyclotetrasiloxane
Aminoethyl aminopropyl trimethoxy silane
Dibutyltin Diacetate(34% as Tin)

US. Massachusetts RTK - Substance List

Chemical Identity

1,2-Ethylenediamine

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.

Inventory Status:

Australia AICS:	y (positive listing)	Remarks: None.
EU EINECS List:	y (positive listing)	Remarks: None.
Japan (ENCS) List:	n (Negative 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 DSL Inventory List:	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: On TSCA Inventory
Taiwan. Taiwan inventory (CSNN):	n (Negative listing)	Remarks: None.

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

HMIS Hazard ID

Health	*	1
Flammability		0
Physical Hazards		0
PERSONAL PROTECTION		

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

RTV128

Issue Date: 06/01/2017

Revision Date: No data available.

Version #: 1.1

Further Information: No data available.

Disclaimer:

Notice to reader

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

Further Information

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

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