

RTV167

SAFETY DATA SHEET

1. Identification of the hazardous chemical and of the supplier

Product identifier: RTV167

Recommended use of the chemical and restrictions on use

Recommended use: Silicone Elastomer

Recommended restrictions: For industrial use only.

Details of principal suppliers

Manufacturer/Importer/Distributor Information : Momentive Performance Materials (Thailand) Limited
1/2 Moo 4, Asia Industrial Estate, Rayong, 21130
Thailand

Contact person : commercial.services@momentive.com

Telephone : +66-3899 7899

Telefax : +66-3899 7888

Emergency telephone number : 001 800 120 666 751 / +65 3158 1074

Responsible Department : Product Stewardship & Compliance

2. Hazard(s) identification

GHS classification of substance or mixture, and national or regional information :
Not classified

GHS label elements

Hazard symbol(s): No symbol

Signal Word: none

Hazard Statement(s): Not applicable

Precautionary statement(s):

Prevention: Not applicable

Response: Not applicable

Storage: Not applicable

Disposal: Not applicable

Other hazards which do not result in GHS classification: None known.

3. Composition and information of the ingredients of the hazardous chemical

Chemical nature: Mixture of polydimethylsiloxanes, fillers and cross-linkers.

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Mixtures

Chemical Identity	CAS number	Content in percent (%)*
TITANIUM DIOXIDE	13463-67-7	>=0.1 - <1%
Octamethylcyclotetrasiloxane	556-67-2	>=0.1 - <1%

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

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

4. First-aid measures

Description of necessary first-aid measures

- Inhalation:** Move to fresh air.
- Skin Contact:** After contact with skin, remove product mechanically. Wash area with soap and water.
- Eye contact:** Rinse the eye with water immediately. If eye irritation persists: Get medical advice/attention.
- Ingestion** If swallowed, do NOT induce vomiting. Give a glass of water. Rinse mouth. Consult a physician for specific advice.

Most important symptoms/effects, acute and delayed

- Symptoms:** Treatment is symptomatic and supportive.
- 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 water spray to keep fire-exposed containers cool.

Suitable (and unsuitable) extinguishing media

- Suitable extinguishing media:** All standard extinguishing agents are suitable.
- Unsuitable extinguishing media:** Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical: In case of fire, carbon monoxide and carbon dioxide may be formed.

Special protective action for fire fighters

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Special fire fighting procedures: Keep away from sources of ignition - No smoking.

Special protective equipment for fire-fighters: Wear self-contained breathing apparatus and protective clothing.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures: Keep container closed. Avoid contact with skin and eyes. Remove contact lenses before using sealant. Do not handle lenses until all sealant has been cleaned from the finger and hands.

Environmental Precautions: Avoid discharge into drains, water courses or onto the ground.

Methods and material for containment and cleaning up: Wipe, scrape or soak up in an inert material and put in a container for disposal. Wear proper protective equipment as specified in the protective equipment section.

7. Handling and storage

Precautions to ensure safe handling: Methanol is formed during processing. Wear appropriate 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	Type	Exposure Limit Values	Source
TITANIUM DIOXIDE	Time Weighted Average (TWA):	10 mg/m3	Malaysia. OELs. (Occupational Safety and Health (Use and Standards of Exposure of Chemicals Hazardous to Health) Regulations)03 2000
(1) TITANIUM DIOXIDE	TWA	10 mg/m3	US. ACGIH Threshold Limit Values (03 2015)

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.

Biological Limit Values

None of the components have assigned exposure limits.

Appropriate Engineering Controls:

Eye wash facilities and emergency shower must be available when handling this product. Ventilation and other forms of engineering controls are preferred for controlling exposures. Respiratory protection may be needed for non-routine or emergency situations.

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Individual protection measures, such as personal protective equipment

- General information:** Wear suitable gloves and eye/face protection.
- Eye/face protection:** Safety glasses with side shields
- Skin Protection**
- Hand Protection:** Rubber gloves are recommended.
- Other:** Wear suitable protective clothing and eye/face protection.
- Respiratory Protection:** In case of insufficient ventilation, wear suitable respiratory equipment.
- Hygiene measures:** Ensure adequate ventilation, especially in confined areas. Avoid contact with eyes, skin, and clothing. Observe good industrial hygiene practices. When using do not eat, drink or smoke. Wash hands after handling.

9. Physical and chemical properties

Appearance

- Physical state:** solid
- Form:** Paste
- Color:** Gray
- Odor:** Sweet
- 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:** Not applicable
- Evaporation rate:** < 1
- 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.
- Vapor pressure:** No data available.
- Vapor density:** No data available.
- Density:** ca. 1.11 g/cm³
- Relative density:** No data available.
- Solubility(ies)**
- Solubility in water:** Insoluble
- Solubility (other):** Insoluble
- 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.

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Viscosity, dynamic: No data available.
Viscosity, kinematic: > 20.5 mm²/s (40 °C)

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. Avoid exposure to: Water

Conditions to avoid: Reacts with water liberating small amounts of methanol.

Incompatible Materials: Water. Strong Acids, Strong Bases

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

Inhalation: No data available.
Skin Contact: No data available.
Eye contact: No data available.
Ingestion: No data available.

Symptoms

Inhalation: No data available.
Skin Contact: No data available.
Eye contact: No data available.
Ingestion: No data available.

Information on toxicological effects

Acute toxicity (list all possible routes of exposure)

Oral Product: No data available.

Specified substance(s):
 TITANIUM DIOXIDE LD 50 (Rat): > 10,000 mg/kg
 Octamethylcyclotetrasiloxane LD 50 (Rat): 4,800 mg/kg

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Dermal

Product: No data available.

Specified substance(s):

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

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

Inhalation

Product: No data available.

Specified substance(s):

TITANIUM DIOXIDE LC50 (Rat, 4 h): > 6.8 mg/l

Octamethylcyclotetrasiloxane LC50 (Rat, 4 h): 36 mg/l

Repeated dose toxicity

Product: No data available.

Skin Corrosion/Irritation

Product: No data available.

Specified substance(s):

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

Serious Eye Damage/Eye Irritation

Product: No data available.

Specified substance(s):

TITANIUM DIOXIDE No eye irritation

Respiratory or Skin Sensitization

Product: No data available.

Specified substance(s):

TITANIUM DIOXIDE negative

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

ACGIH Sensitization

Carcinogenicity

Product: No data available.

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:

No carcinogenic components identified

ACGIH Carcinogen List:

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 Guidline 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.

Other effects: No data available.

12. Ecological information

Ecotoxicity

Acute hazards to the aquatic environment

Fish

Product: No data available.

Specified substance(s):

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

Aquatic Invertebrates

Product: No data available.

Chronic hazards to the aquatic environment

Fish

Product: No data available.

Aquatic Invertebrates

Product: No data available.

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Toxicity to Aquatic Plants

Product: No data available.

Persistence and Degradability

Biodegradation

Product: No data available.

Specified substance(s):

TITANIUM DIOXIDE 0 %
 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):

Octamethylcyclotetrasiloxane Fathead Minnow, Bioconcentration Factor (BCF): 12.40

Partition Coefficient n-octanol / water (log Kow)

Product: No data available.

Mobility

Mobility in soil: No data available.

Known or predicted distribution to environmental compartments

TITANIUM DIOXIDE No data available.
 Octamethylcyclotetrasiloxane No data available.

Other adverse effects: No data available.

13. Disposal information

General information: Do not discharge into drains, water courses or onto the ground. See Section 8 for information on appropriate personal protective equipment.

Disposal methods

Disposal instructions: Dispose of waste at an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal. The generation of waste should be avoided or minimized wherever possible. The hazard and precautionary statements displayed on the label also apply to any residues left in the container.

Contaminated Packaging: Dispose of as unused product.

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14. Transport information

ADR

Not regulated.

IATA

Not regulated.

IMDG

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. Protect from moisture. Keep away from food, foodstuff, acids and bases. keep away from odour sensitive materials

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

Not applicable

15. Regulatory information

Malaysia. Medical Surveillance Chemicals, Occupational Safety and Health (Use and Standards of Exposure of Chemicals Hazardous to Health): Schedule 2

Not Regulated

Malaysia. Prohibited Use of Substances [Occupational Safety and Health (Prohibition of Use of Substance) Order]

Not Regulated

Malaysia. Controlled Precursors Subject to Conditional Exports (Customs (Prohibition of Exports) Order 2012, Second Schedule

Not Regulated

Malaysia. Controlled Precursors Subject to Conditional Imports (Customs (Prohibition of Imports) Order 2012, Part I of Second Schedule)

Not Regulated

Malaysia. CWC. Chemical Weapons Convention Act 2005, (Schedules 1-3)

Not Regulated

Malaysia. Ozone Depleting Substances (ODS) (Environmental Quality (Prohibition on the Use of CFC and Other Gases as Propellants and Blowing Agents) Order 1993)

Not Regulated

Malaysia. Lists of Halon Management (Environmental Quality (Halon Management) Regulation 1999)

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Not Regulated

Malaysia. Refrigerant Hazardous Substance (Environmental Quality (Refrigerant Management) Regulation 1999)

Not Regulated

Malaysia. Active Ingredients of Pesticide Product (Pesticide Act 1974, First Schedule), as amended

Not Regulated

International regulations

Montreal protocol

Not applicable

Stockholm convention

Not applicable

Rotterdam convention

Not applicable

Kyoto protocol

Not applicable

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.
New Zealand Inventory of Chemicals:	y (positive listing)	Remarks: None.
Philippines PICCS:	y (positive listing)	Remarks: None.
US TSCA Inventory:	y (positive listing)	Remarks: None.
Taiwan. Taiwan inventory (CSNN):	y (positive listing)	Remarks: None.

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

Issue Date: 2018/05/04

Revision Date:

Version #: 1.0

Source of information: No data available.

Further Information: No data available.

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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.

Further Information

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

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