RTV 102 - white

SAFETY DATA SHEET

Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Regulation (EU) No. 2015/830

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Product name: RTV 102 - white

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses: Silicone Elastomer
Uses advised against: Not known.

1.3 Details of the supplier of the safety data sheet

Manufacturer/Importer/Distributor Information	:	Momentive Performance Materials GmbH Chempark Leverkusen Gebaeude V7 DE - 51368 Leverkusen Germany
Contact person	:	MomentiveEMEA.productsteward@momentive.com
Telephone	:	General information 00800.4321.1000 (Customer Service Centre)
1.4 Emergency telephone number	:	Europe, Israel & All other: +44 (0) 1235239670; Middle East:+44 (0) 1235239671

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

The product has not been classified as hazardous according to the legislation in force.

Classification according to Regulation (EC) No 1272/2008 as amended.

Not classified

2.2 Label Elements not applicable
Additional Information: No data available.

2.3 Other hazards No data available.

SECTION 3: Composition/information on ingredients

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

3.2 Mixtures

General information: No data available.

Chemical name	Concentration	CAS-No.	EC No.	REACH Registration No.	M-Factor:	Notes

Octamethylcyclotetrasiloxane	1 - <3%	556-67-2	209-136-7	01-2119529238-36-0001	No data available.	
TITANIUM DIOXIDE	1 - <5%	13463-67-7	236-675-5	01-2119489379-17-XXXX	No data available.	#

* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.
# # This substance has workplace exposure limit(s).
PBT: persistent, bioaccumulative and toxic substance.
vPvB: very persistent and very bioaccumulative substance.

Classification

Chemical name	Classification	Notes
Octamethylcyclotetrasiloxane	Flam. Liq.: 3: H226 Repr.: 2: H361fAquatic Chronic: 4: H413	No data available.
TITANIUM DIOXIDE	No data available.	

CLP: Regulation No. 1272/2008.

SECTION 4: First aid measures

4.1 Description of first aid measures

Inhalation: "If inhaled, move victim to fresh air and seek medical attention."

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

Skin Contact: Wash area with soap and water.

Ingestion: Drink plenty of water. Do NOT induce vomiting. Get medical attention.

4.2 Most important symptoms and effects, both acute and delayed: No data available.

4.3 Indication of any immediate medical attention and special treatment needed

Hazards: No data available.

Treatment: No data available.

SECTION 5: Firefighting measures

General Fire Hazards: Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

5.1 Extinguishing media

Suitable extinguishing media: All standard extinguishing agents are suitable.

Unsuitable extinguishing media: No data available.

5.2 Special hazards arising from the substance or mixture: No data available.

5.3 Advice for firefighters

Special fire fighting procedures: No data available.

Special protective equipment for fire-fighters: Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures: Provide adequate ventilation. Use personal protective equipment.

6.2 Environmental Precautions: Do not allow runoff to sewer, waterway or ground.

6.3 Methods and material for containment and cleaning up: Shovel up and place in a container for salvage or disposal.

6.4 Reference to other sections: No data available.

SECTION 7: Handling and storage:

7.1 Precautions for safe handling: Acetic acid is formed during processing. Wear appropriate personal protective equipment.

7.2 Conditions for safe storage, including any incompatibilities: Keep container tightly closed in a cool, well-ventilated place.

7.3 Specific end use(s): No data available.

SECTION 8: Exposure controls/personal protection

8.1 Control Parameters

Occupational Exposure Limits

Chemical name	type	Exposure Limit Values	Source
TITANIUM DIOXIDE - Respirable.	TWA	4 mg/m3	UAE. Dubai. OELs. Maximum Allowable Limits for Indoor Air Pollutants. Industrial Operation Regulation IO-11.0: Appendix, Tables 2 & 2A (10 2010)
TITANIUM DIOXIDE - Inhalable	TWA	10 mg/m3	UAE. Dubai. OELs. Maximum Allowable Limits for Indoor Air Pollutants. Industrial Operation Regulation IO-11.0: Appendix, Tables 2 & 2A (10 2010)
TITANIUM DIOXIDE	TWA	10 mg/m3	GCC. TLVs. Exposure Limits for Hazardous Chemical Substances (Common System for the Management of Hazardous Chemicals in the Gulf Cooperation Council for the Arab States of the Gulf, Annex 3) (2002)
	TWA	10 mg/m3	UAE. OELs. Maximum Allowable Limits for Air Pollutants in Working Areas [Law to Protect the Air from Pollution, Resolution of the Cabinet of Ministers No. 12 of 2006] (2006)

Biological Limit Values

None.

8.2 Exposure controls

Appropriate Engineering Controls: No data available.

Individual protection measures, such as personal protective equipment

General information: No data available.

Eye/face protection: Safety glasses with side-shields conforming to EN166

Skin protection

Hand Protection: Advice**:** There is no risk to health due to contact with the chemical. Use hand protection to prevent mechanically injuries.

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

Respiratory Protection: When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. Respiratory protection mask with Filtertype ABEK

Hygiene measures: Avoid contact with eyes, skin, and clothing. Good personal hygiene is necessary. Wash hands and contaminated areas with water and soap before leaving the work site. When using do not eat, drink or smoke.

Environmental exposure controls: No data available.

SECTION 9: Physical and chemical properties

9.1 Information on basic 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:	No data available.
Boiling Point:	not applicable
Flash Point:	> 93,3 °C (estimated)
Evaporation Rate:	No data available.
Flammability (solid, gas):	No data available.
Flammability Limit - Upper (%):	No data available.
Flammability Limit - Lower (%):	No data available.
Vapor pressure:	No data available.
Vapor density (air=1):	No data available.
Density:	ca. 1,06 g/cm3
Relative density:	No data available.
Solubility(ies)	
Solubility in Water:	Insoluble

Solubility (other):	No data available.
Partition coefficient (n-octanol/water) Log Pow:	not applicable
Autoignition Temperature:	No data available.
Decomposition Temperature:	No data available.
SADT:	No data available.
Viscosity, dynamic:	No data available.
Viscosity, kinematic:	No data available.
Explosive properties:	No data available.
Oxidizing properties:	No data available.

SECTION 10: Stability and reactivity

10.1 Reactivity: No data available.

10.2 Chemical Stability: No data available.

10.3 Possibility of hazardous reactions: No data available.

10.4 Conditions to avoid: Reacts with water liberating small amounts of acetic acid.

10.5 Incompatible Materials: No data available.

10.6 Hazardous Decomposition Products: Measurements at temperatures above 150°C in presence of air (oxygen) have shown that small amounts of formaldehyde are formed due to oxidative degradation.

SECTION 11: Toxicological information

General information: Experience has shown, that the above mentioned product can be used without any danger to health, as long as the usual conditions of industrial hygiene are observed.

Information on likely routes of exposure

Inhalation: No data available.

Ingestion: No data available.

Skin Contact: No data available.

Eye contact: No data available.

11.1 Information on toxicological effects

Acute toxicity

Oral

Product:	ATEmix: 69.700,7 mg/kg
Specified substance(s)	
Octamethylcyclotetrasiloxane	LD 50 (Rat): 4.800 mg/kg LD 50 (Mouse): 1.700 mg/kg
TITANIUM DIOXIDE	LD 50 (Rat): > 10.000 mg/kg

Dermal

Product:	Not classified for acute toxicity based on available data.
Specified substance(s)	
Octamethylcyclotetrasiloxane	LD 50 (Rat): 2.400 mg/kg
TITANIUM DIOXIDE	LD 50 (Rabbit): > 10.000 mg/kg

Inhalation

Product:	Not classified for acute toxicity based on available data.
Specified substance(s)	
Octamethylcyclotetrasiloxane	LC50 (Rat, 4 h): 12,1 mg/l LC50 (Rat, 4 h): 36 mg/l
TITANIUM DIOXIDE	LC50 (Rat, 4 h): > 6,8 mg/l

Repeated dose toxicity

Product:	No data available.
Specified substance(s)	
Octamethylcyclotetrasiloxane	NOAEL (Rat(male and female), Inhalation - vapor(vapour)): 150 mg/kg NOAEL (Rabbit(male and female), Dermal): 950 mg/kg LOAEL (Rabbit(male and female), Dermal): 950 mg/kg
TITANIUM DIOXIDE	No data available.

Skin Corrosion/Irritation:	Not irritating
Product:	No data available.
Specified substance(s)	
Octamethylcyclotetrasiloxane	OECD-Guideline 404 (Acute Dermal Irritation/Corrosion) (Rat): No skin irritation
TITANIUM DIOXIDE	No data available.

Serious Eye Damage/Eye Irritation:	Not irritating
Product:	No data available.
Specified substance(s)	
Octamethylcyclotetrasiloxane	OECD-Guideline 405 (Acute Eye Irritation/Corrosion) (Rabbit): Not irritating
TITANIUM DIOXIDE	No eye irritation

Respiratory or Skin Sensitization:	
Product:	No data available.
Specified substance(s)	
Octamethylcyclotetrasiloxane	, OECD-Guideline 406 (Skin Sensitisation) (Guinea Pig)Not sensitizing
TITANIUM DIOXIDE	negative

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) (Mouse Lymphoma Assay (OECD Guidline 476)): negative (not mutagenic)
TITANIUM DIOXIDE	No data available.

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 Dominant lethal assay (OECD 478) Oral (Rat, male and female): negative
TITANIUM DIOXIDE	No data available.

Carcinogenicity

Product:	No data available.

Specified substance(s)

Octamethylcyclotetrasiloxane	No data available.
TITANIUM DIOXIDE	No data available.

Reproductive toxicity

Product:	No data available.

Specified substance(s)

Octamethylcyclotetrasiloxane	No data available.
TITANIUM DIOXIDE	No data available.

Specific Target Organ Toxicity - Single Exposure

Product:	No data available.

Specified substance(s)

Octamethylcyclotetrasiloxane	No data available.
TITANIUM DIOXIDE	No data available.

Specific Target Organ Toxicity - Repeated Exposure

Product:	No data available.

Specified substance(s)

Octamethylcyclotetrasiloxane	No data available.
TITANIUM DIOXIDE	No data available.

Aspiration Hazard

Product:	No data available.

Specified substance(s)

Octamethylcyclotetrasiloxane	No data available.
TITANIUM DIOXIDE	No data available.

Other Adverse 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.

SECTION 12: Ecological information

12.1 Toxicity

Acute toxicity

Fish

Product:	No data available.

Specified substance(s)

Octamethylcyclotetrasiloxane	No data available.
TITANIUM DIOXIDE	LC0 (Leuciscus idus, 48 h): > 1.000 mg/l

Aquatic Invertebrates

Product:	No data available.

Specified substance(s)

Octamethylcyclotetrasiloxane	No data available.
TITANIUM DIOXIDE	No data available.

Chronic Toxicity

Fish

Product:	No data available.

Specified substance(s)

Octamethylcyclotetrasiloxane	No data available.
TITANIUM DIOXIDE	No data available.

Aquatic Invertebrates

Product:	No data available.

Specified substance(s)

Octamethylcyclotetrasiloxane	No data available.
TITANIUM DIOXIDE	No data available.

Toxicity to Aquatic Plants

Product:	No data available.

Specified substance(s)

Octamethylcyclotetrasiloxane	No data available.
TITANIUM DIOXIDE	No data available.

12.2 Persistence and Degradability

Biodegradation

Product:	No data available.

Specified substance(s)

Octamethylcyclotetrasiloxane	(29 d, 310 Ready Biodegradability - CO_2 in Sealed Vessels (Headspace Test)): 3,7 % Persistent Not readily biodegradable.
TITANIUM DIOXIDE	0 %

BOD/COD Ratio

Product	No data available.

Specified substance(s)

Octamethylcyclotetrasiloxane	No data available.
TITANIUM DIOXIDE	No data available.

12.3 Bioaccumulative Potential

Product:	No data available.

Specified substance(s)

Octamethylcyclotetrasiloxane	Fathead Minnow, Bioconcentration Factor (BCF): 12,40
TITANIUM DIOXIDE	No data available.

12.4 Mobility in Soil: No data available.

Known or predicted distribution to environmental compartments

Octamethylcyclotetrasiloxane	No data available.
TITANIUM DIOXIDE	No data available.

12.5 Results of PBT and vPvB assessment: No data available.

Octamethylcyclotetrasiloxane	No data available.
TITANIUM DIOXIDE	No data available.

12.6 Other Adverse Effects: No data available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

General information: No data available.

Disposal methods: Can be incinerated when in compliance with local regulations.

SECTION 14: Transport information

ADR

Not regulated.

ADN

Not regulated.

RID

Not regulated.

IMDG

Not regulated.

IATA

Not regulated.

14.6 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

14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code:

not applicable

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture:

EU Regulations

Regulation (EC) No. 2037/2000 Substances that deplete the ozone layer: none

Regulation (EC) No. 850/2004 on persistent organic pollutants: none

Regulation (EC) No. 689/2008 Import and export of dangerous chemicals: none

Regulation (EC) No. 1907/2006, REACH Annex XIV Substances subject to authorisation, as amended: none

Regulation (EC) No. 1907/2006 Annex XVII Substances subject to restriction on marketing and use: none

Directive 2004/37/EC on the protection of workers from the risks related to exposure to carcinogens and mutagens at work.: none

Directive 92/85/EEC: on the safety and health of pregnant workers and workers who have recently given birth or are breast feeding.: none

Directive 96/82/EC (Seveso III): on the control of major accident hazards involving dangerous substances: none

EU. Regulation No. 166/2006 PRTR (Pollutant Release and Transfer Registry), Annex II: Pollutants: none

Directive 98/24/EC on the protection of workers from the risks related to chemical agents at work:

Chemical name	CAS-No.	Concentration
Octamethylcyclotetrasiloxane	556-67-2	1,0 - 10%

15.2 Chemical safety assessment: No Chemical Safety Assessment has been carried out.

Inventory Status

Australia AICS:	y (positive listing)
Canada DSL Inventory List:	y (positive listing)
EU EINECS List:	y (positive listing)
Japan (ENCS) List:	y (positive listing)
China Inventory of Existing Chemical Substances:	y (positive listing)
Korea Existing Chemicals Inv. (KECI):	y (positive listing)
Canada NDSL Inventory:	n (Negative listing)
Philippines PICCS:	y (positive listing)
US TSCA Inventory:	y (positive listing)
New Zealand Inventory of Chemicals:	y (positive listing)
Taiwan. Taiwan inventory (CSNN):	y (positive listing)

SECTION 16: Other information

Revision Information: Not relevant.

Key literature references and sources for data: No data available.

Wording of the H-statements in section 2 and 3

H226	Flammable liquid and vapor.
H361f	Suspected of damaging fertility.
H413	May cause long lasting harmful effects to aquatic life.

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Training information: No data available.

Issue Date: 03.06.2016

Disclaimer:

Notice to reader

Unless otherwise specified in section 1.2, Momentive Products are intended for industrial application only.
They are not intended for specific medical applications, neither for long-lasting (> 30 days) implantation into the human body, injected or directly ingested, nor for the manufacture of multiple usable 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.