

RTV664

SAFETY DATA SHEET

1. Identification

Product identifier: RTV664

Other means of identification

Synonyms: Curing Agent

Recommended use and restriction on use

Recommended use: Silicone Elastomer (B)

Restrictions on use: For industrial use only.

Manufacturer/Importer/Distributor 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

Physical Hazards

Flammable liquids Category 4

Health Hazards

Toxic to reproduction Category 2

Toxic to reproduction Category 2

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:

RTV664



Signal Word:	WarningDanger
Hazard Statement:	H227; Combustible liquid. H360F; May damage fertility. H361d; Suspected of damaging the unborn child.H227; Combustible liquid. 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. Wear protective gloves. Wear eye protection/face protection. Keep away from open flames/hot surfaces. - No smoking.Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Wear protective gloves/protective clothing/eye protection/face protection. 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. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower]. In case of fire: Use dry chemical powder to extinguish. IF exposed or concerned: Get medical advice/attention. In case of fire: Use... to extinguish.
Storage:	Store locked up. Store in a well-ventilated place. Keep cool. Store in a well-ventilated place. Keep cool. 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. 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:	Static accumulating flammable liquid can become electrostatically charged even in bonded and grounded equipment. Sparks may ignite liquid and vapor. May cause flash fire or explosion.
Substance(s) formed under the conditions of use:	Reacts with water or alcohol in presence of acids or bases to release hydrogen (flammable gas).

3. Composition/information on ingredients

RTV664

Mixtures

Chemical Identity	CAS number	Content in percent (%)*	Notes
Toluene	108-88-3	0.1 - <1%	# 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:	Rinse mouth thoroughly. Get medical attention.
Inhalation:	Move to fresh air. Get medical attention if symptoms occur.
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.

Most important symptoms/effects, acute and delayed

Symptoms:	No data available.
Hazards:	No data available.

Indication of immediate medical attention and special treatment needed

Treatment:	Treatment is symptomatic and supportive.
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5. Fire-fighting measures

General Fire Hazards:	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. Move containers from fire area if you can do so without risk.
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Suitable (and unsuitable) extinguishing media

Suitable extinguishing media:	Extinguish with foam, carbon dioxide or dry powder.
Unsuitable extinguishing media:	Water.

RTV664

Specific hazards arising from the chemical:

This product may generate the flammable gas (hydrogen) when exposed to acidic or basic water and will intensify the fire, or possibly explode if confined in a container.

If contamination occurs, pressure build up caused by hydrogen gas generation in sealed containers can cause bulging, rupture, or even violent explosion. 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. Measurements at temperatures above 150°C in presence of air (oxygen) have shown that small amounts of formaldehyde are formed due to oxidative degradation.

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

Personal precautions, protective equipment and emergency procedures:

Use personal protective equipment. Avoid contact with eyes, skin, and clothing. 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. Wear proper protective equipment as specified in the protective equipment section.

Notification Procedures:

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

Environmental Precautions:

Do not allow runoff to sewer, waterway or ground.

7. Handling and storage

Precautions for safe handling:

Product may charge electrostatically during pouring or filling. Pack only into unbreakable packing materials (no glass containers !) to avoid contact with substances mentioned in Section 10. Wear appropriate personal protective equipment. When using do not eat, drink or smoke. This product may generate hydrogen gas. Keep away from ignition source. Empty container after use should be stored in separate area, and be disposed after degassing completely. Keep away from sources of ignition - No smoking.

RTV664

Conditions for safe storage, including any incompatibilities:

Keep away from heat, sparks, and open flame. Small amounts of hydrogen may be evolved during shipping and storage, creating a potential for container swelling. Excessive swelling may result in rupturing of the container. Accordingly, if containers swell, vent containers to relieve pressure. Take appropriate precautionary measures when opening to prevent ignition of any hydrogen present.
Use original container or packaging of similar material of construction

8. Exposure controls/personal protection

Control Parameters

Occupational Exposure Limits

Chemical Identity	Type	Exposure Limit Values	Source
Toluene	TWA	20 ppm	US. ACGIH Threshold Limit Values (03 2015)
	STEL	150 ppm 560 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards (2010)
	REL	100 ppm 375 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards (2010)
	TWA	100 ppm 375 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
	STEL	150 ppm 560 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
	TWA	200 ppm	US. OSHA Table Z-2 (29 CFR 1910.1000) (02 2006)
	Ceiling	300 ppm	US. OSHA Table Z-2 (29 CFR 1910.1000) (02 2006)
	MAX. CONC	500 ppm	US. OSHA Table Z-2 (29 CFR 1910.1000) (02 2006)

Biological Limit Values

Chemical Identity	Exposure Limit Values	Source
Toluene (o-Cresol, with hydrolysis: Sampling time: End of shift.)	0.3 mg/g (Creatinine in urine)	ACGIH BEI (03 2015)
Toluene (toluene: Sampling time: Prior to last shift of work week.)	0.02 mg/l (Blood)	ACGIH BEI (03 2015)
Toluene (toluene: Sampling time: End of shift.)	0.03 mg/l (Urine)	ACGIH BEI (03 2015)

Appropriate Engineering Controls

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

Individual protection measures, such as personal protective equipment

General information:

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

RTV664

Hand Protection:	Chemical resistant gloves
Other:	Wear suitable protective clothing, gloves 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. Wear suitable gloves and eye/face protection. Wash hands after handling. When using do not eat, drink or smoke.

9. Physical and chemical properties

Appearance

Physical state:	liquid
Form:	liquid
Color:	Dark blue
Odor:	Faint
Odor threshold:	No data available.
pH:	Not applicable
Melting point/freezing point:	No data available.
Initial boiling point and boiling range:	ca. 260.00 °C
Flash Point:	ca. 71.00 °C (Closed Cup)
Evaporation rate:	No data available.
Flammability (solid, gas):	No data available.
Upper/lower limit on flammability or explosive limits	
Flammability limit - upper (%):	No data available.
Flammability limit - lower (%):	No data available.
Explosive limit - upper (%):	No data available.
Explosive limit - lower (%):	No data available.
Heat of combustion:	No data available.
Vapor pressure:	No data available.
Vapor density:	No data available.
Density:	ca. 1.05 g/cm ³
Relative density:	ca. 1.05
Solubility(ies)	
Solubility in water:	Insoluble
Solubility (other):	Insoluble
Partition coefficient (n-octanol/water) Log	No data available.

RTV664

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: 5 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: Product generates flammable gas on contact with acids, bases or oxidizing substances.

Conditions to avoid: Keep away from moisture. Keep away from heat, sparks and open flame.

Incompatible Materials: Strong Acids, Strong Bases Oxidizing agents.

Hazardous Decomposition Products: Flammable hydrogen gas. Carbon oxides Oxides of silicon. 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.

RTV664

Information on toxicological effects

Acute toxicity (list all possible routes of exposure)

Oral

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

Dermal

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

Specified substance(s):

Toluene LD 50 (Rabbit): 12,124 mg/kg

Inhalation

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

Specified substance(s):

Toluene LC50 (Rat): 30.6 mg/l

Repeated dose toxicity

Product: No data available.

Skin Corrosion/Irritation

Product: No data available.

Specified substance(s):

Toluene Corrosive

Serious Eye Damage/Eye Irritation

Product: (Rabbit): No eye irritation

Respiratory or Skin Sensitization

Product: Magnusson-Kligmann (Guinea Pig): In tests with guinea-pigs, the product did not show a sensitising effect (OECD 406; GPMT according to Magnusson-Kligman).

Carcinogenicity

Product: No data available.

RTV664

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.

In vivo

Product: No data available.

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: LC0 (Leuciscus idus, 96 h): 200 mg/l

Aquatic Invertebrates

Product: No data available.

Specified substance(s):

RTV664

Toluene LC0 (Daphnia magna): 93 mg/l
(Daphnia magna): 270 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.

Persistence and Degradability

Biodegradation

Product: No data available.

BOD/COD Ratio

Product: No data available.

Bioaccumulative potential

Bioconcentration Factor (BCF)

Product: No data available.

Partition Coefficient n-octanol / water (log Kow)

Product: No data available.

Mobility in soil: No data available.

Known or predicted distribution to environmental compartments

Toluene No data available.

Other adverse effects: No data available.

13. Disposal considerations

General information:

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

Disposal instructions:

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

RTV664

Contaminated Packaging: Dispose of as unused product.

14. Transport information

DOT

UN Number:	NA 1993
UN Proper Shipping Name:	Combustible liquid, n.o.s.(METHYLHYDROGENPOLYSILOXANE)
Transport Hazard Class(es)	
Class:	CBL
Label(s):	NONE
Packing Group:	III
Marine Pollutant:	No

IMDG

Not regulated.

IATA

Not regulated.

Special precautions for user:

This product is not prohibited for air shipment by national or international regulations on the transport of dangerous goods. However, as a result of the potential formation of hydrogen gas under certain conditions, Momentive Performance Materials recommends that this product should be shipped using a mode of transportation other than air (IATA-C, IATA-P).

15. Regulatory information

US Federal Regulations

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

Fire Hazard
Delayed (Chronic) Health Hazard

SARA 302 Extremely Hazardous Substance

None present or none present in regulated quantities.

RTV664

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>
Toluene	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.

Toluene	Maximum Allowable Dose Level (MADL): 13000 µg/day. Developmental toxin.
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US. New Jersey Worker and Community Right-to-Know Act

Chemical Identity
METHYLHYDROGENPOLYSILOXANE
polyvinylsiloxane
Polyalkylalkenylsiloxane
C.I. PIGMENT BLUE 29
Cyclotetrasiloxane, 2,4,6,8-tetraethenyl-2,4,6,8-tetramethyl-
Toluene

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.

RTV664

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):	y (positive listing)	Remarks: None.

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

HMIS Hazard ID

Health	*	0
Flammability		2
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: 03/30/2018

Revision Date: No data available.

Version #: 3.0

Further Information: No data available.

RTV664

Disclaimer:

Notice to reader

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

Further Information

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for 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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