

**RTV11 001
SILICONE RUBBER COMPOUND****1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**

Manufacturer Name: Momentive performance material
260 Hudson River Rd
Waterford NY 12188

Revised: 07/12/2012

Prepared by Product Regulatory Compliance
CHEMTREC 1-800-424-9300
MSDS Contact 1-888-443-9466
Information 4information@momentive.com

Chemical Family/Use: Silicone Rubber

Formula: Mixture

HMIS

Health: 1 Flammability: 1 Reactivity: 0

NFPA

Health: 1 Flammability: 1 Reactivity: 0

2. HAZARDS IDENTIFICATION**EMERGENCY OVERVIEW**

CAUTION! Attention: Not for injection into humans.

Form: Liquid

Form: White

Odor: Faint

POTENTIAL HEALTH EFFECTS**INGESTION**

May be harmful if swallowed.

SKIN

Skin irritation is possible after contact with the uncured product.

INHALATION

None known.

EYES

May cause eye irritation.

MEDICAL CONDITIONS AGGRAVATED

None known.

**RTV11 001
SILICONE RUBBER COMPOUND****SUBCHRONIC (TARGET ORGAN)**

Respiratory System

CHRONIC EFFECTS / CARCINOGENICITY

This product or one of its ingredients present at 0.1% or more is NOT listed as a carcinogen or suspected carcinogen by NTP, IARC, or OSHA.

ROUTES OF EXPOSURE

Dermal

3. COMPOSITION/INFORMATION ON INGREDIENTS

<u>PRODUCT COMPOSITION</u>	<u>CAS-No.</u>	<u>WGT. %</u>
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A. HAZARDOUS

Silicic acid, ethyl ester	11099-06-2	1 - 5 %
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B. NON-HAZARDOUS

Siloxanes and Silicones, di-Me hydroxy terminated	70131-67-8	60 - 100 %
Calcium Carbonate	471-34-1	10 - 30 %

4. FIRST AID MEASURES**INGESTION**

None known.

SKIN

Wash area with soap and water.

INHALATION

None known.

EYES

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

**RTV11 001
SILICONE RUBBER COMPOUND****NOTE TO PHYSICIAN**

None known.

5. FIRE-FIGHTING MEASURES

FLASH POINT: ca. 298 °C; 568 °F
METHOD Open Cup
IGNITION TEMPERATURE: 450 °C; 842 °F; Not applicable
FLAMMABLE LIMITS LEL: Not applicable
FLAMMABLE LIMITS UEL: Not applicable

SENSITIVITY TO MECHANICAL IMPACT: No

SENSITIVITY TO STATIC DISCHARGE

Sensitivity to static discharge is not expected.

EXTINGUISHING MEDIA

All standard extinguishing agents are suitable.

SPECIAL FIRE FIGHTING PROCEDURES

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

6. ACCIDENTAL RELEASE MEASURES**ACTION TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED**

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 TO BE TAKEN IN HANDLING AND STORAGE**

Keep container closed. Avoid inhalation of vapors and spray mists. Avoid contact with skin and eyes. Use only in well-ventilated areas. Keep out of reach of children. May generate formaldehyde at temperatures greater than 150 C(300 F). See Section 8 of the MSDS for Personal Protective Equipment.

STORAGE

Keep container tightly closed. Keep out of the reach of children.

**RTV11 001
SILICONE RUBBER COMPOUND****8. EXPOSURE CONTROLS/PERSONAL PROTECTION****ENGINEERING CONTROLS**

Eye wash facilities and emergency shower must be available when handling this product.; Use only in well-ventilated areas.

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).

EYE AND FACE PROTECTION

Safety glasses with side shields

OTHER PROTECTIVE EQUIPMENT

None known.

Exposure Guidelines

<u>Component</u>	<u>CAS-No.</u>	<u>Source</u>	<u>Value</u>
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Absence of values indicates none found

PEL - OSHA Permissible Exposure Limit; TLV - ACGIH Threshold Limit Value; TWA - Time Weighted Average; INTL REL - Internal Recommended Exposure Limit

OSHA revoked the Final Rule Limits of January 19, 1989 in response to the 11th Circuit Court of Appeals decision (AFL-CIO v. OSHA) effective June 30, 1993. See 29 CFR 1910.1000 (58 FR 35338).

9. PHYSICAL AND CHEMICAL PROPERTIES

BOILING POINT (°C):	No data available.
VAPOR PRESSURE (20 C) (MM HG):	No data available.
VAPOR DENSITY (AIR=1):	No data available.
FREEZING POINT:	No data available.
PHYSICAL STATE:	Liquid
ODOR:	Faint
Color:	White
EVAPORATION RATE (BUTYL ACETATE=1):	> 1
SPECIFIC GRAVITY:	ca. 1.2
DENSITY:	1.18 g/cm3
ACID / ALKALINITY (MEQ/G):	No data available.

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SILICONE RUBBER COMPOUND**

pH:	Not applicable
SOLUBILITY IN WATER (20 C):	Insoluble
SOLUBILITY IN ORGANIC SOLVENT (STATE SOLVENT):	Soluble in toluene xylene
VOLATILE ORGANIC CONTENT:	2 %(m)
VOC EXCL. H2O & EXEMPTS (G/L):	6 g/l

10. STABILITY AND REACTIVITY**STABILITY**

Stable

HAZARDOUS POLYMERIZATION.

Hazardous polymerisation does not occur.

HAZARDOUS THERMAL DECOMPOSITION / COMBUSTION PRODUCTS

Carbon dioxide; Silicon dioxide.; Formaldehyde.; This product contains methylpolysiloxanes which will likely 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 has been classified by the National Toxicology Program as a known human carcinogen. A MSDS for formaldehyde is available from Momentive. See Section 11 for additional information on formaldehyde.

INCOMPATIBLE MATERIALS

None known.

CONDITIONS TO AVOID

None known.

11. TOXICOLOGICAL INFORMATION**ACUTE ORAL**

Remarks: No data available.

CARCINOGENICITY

The National Toxicology Program (NTP) classifies formaldehyde as "known to be a human carcinogen" with respect to nasopharyngeal cancer, sinonasal cancer and myeloid leukemia. The International Agency for Research on Cancer (IARC) classifies formaldehyde as "carcinogenic to humans". U.S. OSHA regulates formaldehyde as a potential human carcinogen. See the OSHA Formaldehyde Workplace Standard at 29 CFR 1920.1048 (the "OSHA Standard"). Safe handling and use instructions are provided in this MSDS and in the OSHA Standard. OSHA has identified 0.5 ppm, calculated as an eight-hour time-weighted average ("TWA") concentration, as the "Action Level". Please review and understand the guidance contained in this MSDS, and refer to the OSHA Standard for regulatory requirements that might be applicable to your operation and use. Many studies and other evaluations

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have been performed concerning formaldehyde's potential to cause cancer. To review some of these studies and for further information go to www.osha.gov; <http://monographs.iarc.fr>; <http://ntp-server.niehs.nih.gov>; <http://epa.gov>; <http://www.nap.edu> and other authoritative websites then search on formaldehyde.

ACUTE DERMAL

Remarks: No data available.

ACUTE INHALATION

Remarks: No data available.

OTHER

None.

SENSITIZATION

No data available.

SKIN IRRITATION.

No data available.

EYE IRRITATION

No data available.

MUTAGENICITY

No data available.

12. ECOLOGICAL INFORMATION**ECOTOXICITY**

No data available.

DISTRIBUTION

No data available.

CHEMICAL FATE

No data available.

13. DISPOSAL CONSIDERATIONS**DISPOSAL METHODS**

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

**RTV11 001
SILICONE RUBBER COMPOUND****14. TRANSPORT INFORMATION****Further Information:**

This product is not regarded as dangerous goods according to the national and international regulations on the transport of dangerous goods.

15. REGULATORY INFORMATION**Inventories**

Australia Inventory of Chemical Substances (AICS)	y (positive listing)	
EU list of existing chemical substances	y (positive listing)	
Japan Inventory of Existing & New Chemical Substances (ENCS)	y (positive listing)	
China Inventory of Existing Chemical Substances	y (positive listing)	
Korea Existing Chemicals Inventory (KECI)	y (positive listing)	
Canada DSL Inventory	y (positive listing)	
Canada NDSL Inventory	n (Negative listing)	
Philippines Inventory of Chemicals and Chemical Substances (PICCS)	y (positive listing)	
TSCA list	y (positive listing)	On TSCA Inventory

For inventories that are marked as quantity restricted or special cases, please contact Momentive.

US Regulatory Information

CERCLA Reportable quantity 111857 lbs

PRODUCT COMPOSITION

Ethanol

Chemical

64-17-5

CERCLA Reportable Quantity

Reportable quantity: 100 LBS

SARA (311,312) HAZARD CLASS

Acute Health Hazard

CALIFORNIA PROPOSITION 65

Warning! This product contains a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

Canadian Regulatory Information**WHMIS CLASSIFICATION**

**RTV11 001
SILICONE RUBBER COMPOUND**

D2B - Toxic Material Causing Other Toxic Effects

Other**SCHDLE B/HTSUS:** 3910.00.0000 Silicones in primary forms**ECCN:** EAR99**16. OTHER INFORMATION****OTHER**

These data are offered in good faith as typical values and not as product specifications. No warranty, either expressed or implied, is made. The recommended industrial hygiene and safe handling procedures are believed to be generally applicable. However, each user should review these recommendations in the specific context of the intended use and determine whether they are appropriate.

,C = ceiling limit NEGL = negligible
EST = estimated NF = none found
NA = not applicable UNKN = unknown
NE = none established REC = recommended
ND = none determined V = recommended by vendor
SKN = skin TS = trade secret
R = recommended MST = mist
NT = not tested STEL = short term exposure limit
ppm = parts per million ppb = parts per billion
By-product= reaction by-product, TSCA inventory status not required under 40 CFR part 720.30(h-2).

**RTV11 001
Tin Catalyst (DBT)****1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**

Manufacturer Name: Momentive performance material
260 Hudson River Rd
Waterford NY 12188

Revised: 08/24/2012
Prepared by Product Regulatory Compliance
CHEMTREC 1-800-424-9300
MSDS Contact 1-888-443-9466
Information 4information@momentive.com

Chemical Family/Use: Catalyst

Formula: Catalyst

HMIS

Health: 2 Flammability: 1 Reactivity: 0

NFPA

Health: 2 Flammability: 1 Reactivity: 0

2. HAZARDS IDENTIFICATION**EMERGENCY OVERVIEW**

WARNING! Causes skin and eye irritation. Harmful: danger of serious damage to health by prolonged exposure if swallowed.

Form: Liquid

Form: Colorless

Odor: Faint

POTENTIAL HEALTH EFFECTS**INGESTION**

Affects: - mouth, throat, esophagus and stomach Causes the following effects: - discomfort or pain in the mouth, throat, chest and abdomen

SKIN

Causes the following effects: - discomfort or pain - swelling

INHALATION

Vapors given off by heated product may be harmful. May cause irritation to the respiratory system.

EYES

Causes the following effects: - discomfort or pain - excess blinking - tear production - marked excess redness of the conjunctivae - swelling of the conjunctivae

RTV11 001
Tin Catalyst (DBT)**MEDICAL CONDITIONS AGGRAVATED**

Central nervous system disorders.

SUBCHRONIC (TARGET ORGAN)

Central nervous system.

CHRONIC EFFECTS / CARCINOGENICITY

This product or one of its ingredients present at 0.1% or more is NOT listed as a carcinogen or suspected carcinogen by NTP, IARC, or OSHA.

ROUTES OF EXPOSURE

Dermal; Oral; Eye

3. COMPOSITION/INFORMATION ON INGREDIENTS**PRODUCT COMPOSITION****CAS-No.****WGT. %****A. HAZARDOUS**

Dibutyltin Dilaurate

77-58-7

60 - 100 %

B. NON-HAZARDOUS**4. FIRST AID MEASURES****SKIN**

Wash area with soap and water. Wash contaminated clothing before reuse.

INHALATION

Move to fresh air. Get medical attention if symptoms persist.

5. FIRE-FIGHTING MEASURES**FLASH POINT:**
METHOD+/- 191 °C; 376 °F
other methods

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Tin Catalyst (DBT)**

IGNITION TEMPERATURE: > 300 °C; 572 °F
FLAMMABLE LIMITS LEL: 3.30 %(V).
FLAMMABLE LIMITS UEL: 19.00 %(V).

SENSITIVITY TO MECHANICAL IMPACT: No

SENSITIVITY TO STATIC DISCHARGE

Sensitivity to static discharge is not expected., Do not taste or swallow., Wash thoroughly after handling.

EXTINGUISHING MEDIA

All standard extinguishing agents are suitable.

SPECIAL FIRE FIGHTING PROCEDURES

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

6. ACCIDENTAL RELEASE MEASURES**ACTION TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED**

Wipe, scrape or soak up in an inert material and put in a container for disposal. Warn other workers of spill. Wash walking surfaces with detergent and water to reduce slipping hazard. Wear proper protective equipment as specified in the protective equipment section. Avoid runoff to natural waters a component is known to be toxic to marine life.

7. HANDLING AND STORAGE**PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE**

Use only in well-ventilated areas. Avoid contact with skin and eyes. Avoid inhalation of vapors and spray mists. Keep container closed. Wash hands before eating, drinking, or smoking. Keep out of reach of children.

STORAGE

Store in tightly closed original container in a dry and cool place.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION**ENGINEERING CONTROLS**

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

RTV11 001
Tin Catalyst (DBT)**RESPIRATORY PROTECTION**

None known.

OTHER PROTECTIVE EQUIPMENT

None known.

Exposure Guidelines

<u>Component</u>	<u>CAS-No.</u>	<u>Source</u>	<u>Value</u>
Dibutyltin Dilaurate	77-58-7	ACGIH, TWA	0.1 mg/m3
Dibutyltin Dilaurate	77-58-7	ACGIH, STEL	0.2 mg/m3
Dibutyltin Dilaurate	77-58-7	ACGIH, SKIN_DES	Can be absorbed through the skin.
Dibutyltin Dilaurate	77-58-7	OSHA Z1, PEL	0.1 mg/m3
Dibutyltin Dilaurate	77-58-7	ACGIH, TWA	2 mg/m3
Dibutyltin Dilaurate	77-58-7	OSHA Z1, PEL	2 mg/m3

Absence of values indicates none found

PEL - OSHA Permissible Exposure Limit; TLV - ACGIH Threshold Limit Value; TWA - Time Weighted Average; INTL REL - Internal Recommended Exposure Limit

OSHA revoked the Final Rule Limits of January 19, 1989 in response to the 11th Circuit Court of Appeals decision (AFL-CIO v. OSHA) effective June 30, 1993. See 29 CFR 1910.1000 (58 FR 35338).

9. PHYSICAL AND CHEMICAL PROPERTIES

BOILING POINT (°C):	205 °C; 401 °F
VAPOR PRESSURE (20 C) (MM HG):	Negligible
VAPOR DENSITY (AIR=1):	No data available.
FREEZING POINT:	Not applicable
PHYSICAL STATE:	Liquid
ODOR:	Faint
Color:	Colorless
EVAPORATION RATE (BUTYL ACETATE=1):	No data available.
SPECIFIC GRAVITY:	1.28
DENSITY:	ca. 1.280 g/cm3
ACID / ALKALINITY (MEQ/G):	No data available.
pH:	Not applicable
SOLUBILITY IN WATER (20 C):	Slightly Soluble
SOLUBILITY IN ORGANIC SOLVENT (STATE SOLVENT):	No data available.
VOC EXCL. H2O & EXEMPTS (G/L):	27 g/l

RTV11 001
Tin Catalyst (DBT)**10. STABILITY AND REACTIVITY****STABILITY**

Stable

HAZARDOUS POLYMERIZATION.

Hazardous polymerisation does not occur.

HAZARDOUS THERMAL DECOMPOSITION / COMBUSTION PRODUCTS

Carbon dioxide; Carbon Monoxide.; Formaldehyde.; Tin fumes.

INCOMPATIBLE MATERIALS

None known.

CONDITIONS TO AVOID

None known.

11. TOXICOLOGICAL INFORMATION**ACUTE ORAL**

Remarks: Not applicable

ACUTE DERMAL

Remarks: Not applicable

ACUTE INHALATION

Remarks: Not applicable

OTHER

Contains dibutyl tin dilaurate which may cause birth defects and reproductive effects based on animal data.,In animal studies with repeated oral application of dibutyl tin compounds toxic effects were observed on the liver, bile duct, brain and immune system.

SENSITIZATION

No data available.

SKIN IRRITATION.

Species: Rabbit; Irritant.

EYE IRRITATION

Species: Rabbit ; Result: Irritating to eyes.

MUTAGENICITY

No data available.

**RTV11 001
Tin Catalyst (DBT)**

OTHER EFFECTS OF OVEREXPOSURE

None known.

12. ECOLOGICAL INFORMATION**ECOTOXICITY**

No data available.

DISTRIBUTION

No data available.

CHEMICAL FATE

No data available.

13. DISPOSAL CONSIDERATIONS**DISPOSAL METHODS**

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

14. TRANSPORT INFORMATION**DOT SHIPPING NAME:** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,
N.O.S.(DIBUTYLTIN DILAUATE)**DOT HAZARD CLASS:** 9**DOT LABEL (S):** 9**UN/NA NUMBER:** UN3082**PACKING GROUP:** III**IMDG SHIPPING NAME:** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,
N.O.S.(DIBUTYLTIN DILAUATE)**CLASS:** 9**IMDG-Labels:** 9**UN NUMBER:** UN3082**PACKING GROUP:** III**EmS No.:** F-A; S-F**IATA:** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,
N.O.S.(DIBUTYLTIN DILAUATE)**CLASS:** 9**ICAO-Labels:** 9MI**UN NUMBER:** UN3082**PACKING GROUP:** III

**RTV11 001
Tin Catalyst (DBT)**

Further Information:

This substance/preparation meets the criteria of a Marine Pollutant (see IMDG paragraph 2.9.3.3) but is not identified in the IMDG Code (Marpol list). As such, substance/preparation shall be transported as a marine pollutant in accordance with the IMDG code.

15. REGULATORY INFORMATION**Inventories**

Australia Inventory of Chemical Substances (AICS)	y (positive listing)
Canada DSL Inventory	y (positive listing)
EU list of existing chemical substances	y (positive listing)
Japan Inventory of Existing & New Chemical Substances (ENCS)	y (positive listing)
China Inventory of Existing Chemical Substances	y (positive listing)
Korea Existing Chemicals Inventory (KECI)	y (positive listing)
Canada NDSL Inventory	n (Negative listing)
Philippines Inventory of Chemicals and Chemical Substances (PICCS)	y (positive listing)
TSCA list	y (positive listing)
New Zealand Inventory of Chemicals	y (positive listing)
Japan Industrial Safety & Health Law (ISHL) Listing	y (positive listing)

For inventories that are marked as quantity restricted or special cases, please contact Momentive.

US Regulatory Information**SARA (311,312) HAZARD CLASS**

Acute Health Hazard

CALIFORNIA PROPOSITION 65

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

Canadian Regulatory Information**WHMIS CLASSIFICATION**

D1B - Toxic Material Causing Immediate and Serious Toxic Effects

D2B - Toxic Material Causing Other Toxic Effects

**RTV11 001
Tin Catalyst (DBT)**

Other**SCHDLE B/HTSUS:** 3910.00.0000 Silicones in primary forms**ECCN:** EAR99**16. OTHER INFORMATION****OTHER**

C = ceiling limit NEGL = negligible
EST = estimated NF = none found
NA = not applicable UNKN = unknown
NE = none established REC = recommended
ND = none determined V = recommended by vendor
SKN = skin TS = trade secret
R = recommended MST = mist
NT = not tested STEL = short term exposure limit

ppm = parts per million ppb = parts per billion

By-product= reaction by-product, TSCA inventory status not required under 40 CFR part 720.30(h-2).

, These data are offered in good faith as typical values and not as product specifications. No warranty, either expressed or implied, is made. The recommended industrial hygiene and safe handling procedures are believed to be generally applicable. However, each user should review these recommendations in the specific context of the intended use and determine whether they are appropriate.