MATERIAL SAFETY DATA SHEET

Version: 1.17 08/24/2012

RTV60 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



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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 C	CAS-No.	<u>WGT. %</u>
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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: +/- 191 °C; 376 °F **METHOD** other methods



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IGNITION TEMPERATURE:> 300 °C; 572 °FFLAMMABLE 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.



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RESPIRATORY PROTECTION

None known.

OTHER PROTECTIVE EQUIPMENT

None known.

Exposure Guidelines

Component	CAS-No.	Source	<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 Colorless Color:

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. Not applicable **SOLUBILITY IN WATER (20 C):** Slightly Soluble No data available.

SOLUBILITY IN ORGANIC SOLVENT (STATE

SOLVENT):

VOC EXCL. H2O & EXEMPTS (G/L): 27 g/l



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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.

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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 DILAURATE)

DOT HAZARD CLASS: 9
DOT LABEL (S): 9

UN/NA NUMBÉR: UN3082
PACKING GROUP: III

IMDG SHIPPING NAME: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S.(DIBUTYLTIN DILAURATE)

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 DILAURATE)

CLASS: 9
ICAO-Labels: 9MI
UN NUMBER: UN3082

PACKING GROUP: III

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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 y (positive listing)

Substances (AICS)

Canada DSL Inventory y (positive listing) EU list of existing chemical y (positive listing)

substances

Japan Inventory of Existing & New y (positive listing)

Chemical Substances (ENCS)

China Inventory of Existing y (positive listing)

Chemical Substances

Korea Existing Chemicals y (positive listing)

Inventory (KECI)

Canada NDSL Inventory n (Negative listing)
Philippines Inventory of Chemicals y (positive listing)

and Chemical Substances

(PICCS)

TSCA list y (positive listing)
New Zealand Inventory of y (positive listing)

Chemicals

Japan Industrial Safety & Health y (positive listing)

Law (ISHL) 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



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RTV60 Tin Catalyst (DBT)

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.

MATERIAL SAFETY DATA SHEET

Version: 1.12 02/06/2013

RTV60 SILICONE RUBBER

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Manufacturer Name: Momentive Performance Materials LLC

260 Hudson River Road Waterford NY 12188

Revised: 02/06/2013

Prepared by Product Safety Team 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

Form: Liquid Form: Red Odor: Faint

POTENTIAL HEALTH EFFECTS

None

3. COMPOSITION/INFORMATION ON INGREDIENTS

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

Silicic acid, ethyl ester 11099-06-2 1 - 5 %



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RTV60 SILICONE RUBBER

B. NON-HAZARDOUS

Siloxanes and Silicones, di-Me 70131-67-8 30 - 60 %

hydroxy terminated

 Red iron oxide
 1309-37-1
 30 - 60 %

 Diatomaceous Earth
 68855-54-9
 10 - 30 %

 Cristobalite
 14464-46-1
 5 - 10 %

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.

NOTE TO PHYSICIAN

None known.

5. FIRE-FIGHTING MEASURES

FLASH POINT:ca. 109 °C; 228 °FMETHODClosed CupFLAMMABLE LIMITS LEL:No data available.FLAMMABLE LIMITS UEL:No data available.

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.



Version: 1.12 02/06/2013

RTV60 SILICONE RUBBER

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.

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).

PROTECTIVE GLOVES

Rubber gloves are recommended.

EYE AND FACE PROTECTION

Safety glasses with side shields

OTHER PROTECTIVE EQUIPMENT

None known.

Exposure Guidelines

	<u>Component</u>	CAS-No.	<u>Source</u>	<u>Value</u>
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RTV60 SILICONE RUBBER

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): Not applicable VAPOR PRESSURE (20 C) (MM HG): No data available.

VAPOR DENSITY (AIR=1): > 7

FREEZING POINT: Not applicable

PHYSICAL STATE: Liquid ODOR: Faint Color: Red

EVAPORATION RATE (BUTYL ACETATE=1): No data available.

SPECIFIC GRAVITY: ca. 1.48 **DENSITY:** ca. 1.48 g/cm3 ACID / ALKALINITY (MEQ/G): No data available. No data available. Slightly Soluble **SOLUBILITY IN WATER (20 C): SOLUBILITY IN ORGANIC SOLVENT (STATE** No data available.

SOLVENT):

VOC EXCL. H2O & EXEMPTS (G/L): 15 g/l

10. STABILITY AND REACTIVITY

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 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.



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RTV60 SILICONE RUBBER

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 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.



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RTV60 SILICONE RUBBER

12. ECOLOGICAL INFORMATION

ECOTOXICITY

No data available.

DISTRIBUTION

No data available.

CHEMICAL FATE

No data available.

13. DISPOSAL CONSIDERATIONS

None

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 y (positive listing)

Substances (AICS)

EU list of existing chemical y (positive listing)

substances

Japan Inventory of Existing & New y (positive listing)

Chemical Substances (ENCS)

China Inventory of Existing y (positive listing)

Chemical Substances

Korea Existing Chemicals y (positive listing)

Inventory (KECI)

Canada DSL Inventory y (positive listing)
Canada NDSL Inventory n (Negative listing)
Philippines Inventory of Chemicals y (positive listing)

and Chemical Substances

(PICCS)

TSCA list y (positive listing) On TSCA Inventory



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RTV60 SILICONE RUBBER

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

US Regulatory Information

CERCLAReportable quantity 170940 lbs
PRODUCT COMPOSITION Chemical
Ethanol 64-17-5

CERCLA Reportable Quantity
Reportable quantity: 100 LBS

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

D2B - Toxic Material Causing Other Toxic Effects

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).