

Version: 1.16 07/10/2012

RTV21 Tin Catalyst (DBT)

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Manufacturer	Name:	Momentive per 260 Hudson R Waterford NY	iver Rd	ce material	
Revised: Prepared by CHEMTREC MSDS Contac Information	et	07/10/2012 Product Regula 1-800-424-9300 1-888-443-9466 4information@r	5		
Chemical Fan	nily/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	CAS-No.	<u>WGT. %</u>
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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IGNITION TEMPERATURE: FLAMMABLE LIMITS LEL: FLAMMABLE LIMITS UEL: > 300 °C; 572 °F 3.30 %(V). 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	Value
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): VAPOR PRESSURE (20 C) (MM HG): VAPOR DENSITY (AIR=1): FREEZING POINT: **PHYSICAL STATE:** ODOR: Color: **EVAPORATION RATE (BUTYL ACETATE=1): SPECIFIC GRAVITY: DENSITY:** ACID / ALKALINITY (MEQ/G): pH: SOLUBILITY IN WATER (20 C): SOLUBILITY IN ORGANIC SOLVENT (STATE SOLVENT): VOC EXCL. H2O & EXEMPTS (G/L):

205 °C; 401 °F Negligible No data available. Not applicable Liquid Faint Colorless No data available. 1.28 ca. 1.280 g/cm3 No data available. Not applicable Slightly Soluble No data available.

27 g/l

MOMENTIVE

MATERIAL SAFETY DATA SHEET

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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: DOT HAZARD CLASS: DOT LABEL (S): UN/NA NUMBER: PACKING GROUP:	Environmentally hazardous substance, liquid, n.o.s., LTD QTY(DIBUTYLTIN DILAURATE) 9 9 UN3082 III
IMDG SHIPPING NAME: CLASS: IMDG-Labels: UN NUMBER: PACKING GROUP: EmS No.:	Environmentally hazardous substance, liquid, n.o.s., LTD QTY(DIBUTYLTIN DILAURATE) 9 9 UN3082 III F-A; S-F
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.

MOMENTIVE

MATERIAL SAFETY DATA SHEET

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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	y (poolaro notang)
Japan Industrial Safety & Health	y (positive listing)
Law (ISHL) Listing	y (positive listing)
Law (ISHL) LISUING	actricted or appeid appear

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

16. OTHER INFORMATION

OTHER

C = ceiling limit NEGL = negligible

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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.



Version: 1.5 02/07/2012

RTV21

Silicone Rubber Compound

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Manufacturer Name: Revised:		Momentive performance material 260 Hudson River Rd Waterford NY 12188 02/07/2012			
Prepared by CHEMTREC			WARDSHIF	P COMPLIANCE	AND STANDARDS
Chemical Famil	y/Use:	Silicone			
HMIS Health:	1	Flammability:	0	Reactivity:	0
NFPA Health:	1	Flammability:	0	Reactivity:	0

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

CAUTION! May cause eye irritation. Attention: Not for injection into humans. Form: Liquid Color: Red 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.

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.



Version: 1.5 02/07/2012

RTV21

Silicone Rubber Compound

ROUTES OF EXPOSURE Dermal

3. COMPOSITION/INFORMATION ON INGREDIENTS

PRODUCT COMPOSITION	CAS-No.	<u>WGT. %</u>
A. HAZARDOUS		
Silicic acid, ethyl ester	11099-06-2	1 - 5 %
B. NON-HAZARDOUS		
Siloxanes and Silicones, di-Me hydroxy terminated	70131-67-8	60 - 100 %
Calcium Carbonate	471-34-1	10 - 30 %
Zinc oxide	1314-13-2	10 - 30 %
Diiron trioxide	1309-37-1	1 - 5 %

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.

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Silicone Rubber Compound

5. FIRE-FIGHTING MEASURES

FLASH POINT: FLAMMABLE LIMITS LEL: FLAMMABLE LIMITS UEL: > 100 °C; 212 °F No data available. No data available.

No

SENSITIVITY TO STATIC DISCHARGE

SENSITIVITY TO MECHANICAL IMPACT:

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.

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

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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

	Component	CAS-No.	<u>Source</u>	Value
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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): VAPOR PRESSURE: VAPOR DENSITY (AIR=1): FREEZING POINT: **PHYSICAL STATE:** ODOR: Color: **EVAPORATION RATE (BUTYL ACETATE=1): SPECIFIC GRAVITY: DENSITY:** ACID / ALKALINITY (MEQ/G): pH: SOLUBILITY IN WATER (20 C): SOLUBILITY IN ORGANIC SOLVENT (STATE SOLVENT): VOC EXCL. H2O & EXEMPTS (G/L):

No data available. No data available. No data available. No data available. Liquid Faint Red Not applicable ca. 1.3 ca. 1,318 g/cm3 No data available. No data available. Insoluble No data available.



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Silicone Rubber Compound

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 can 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 potential cancer hazard. A MSDS for formaldehyde is available from Momentive.

INCOMPATIBLE MATERIALS

None known.

CONDITIONS TO AVOID

None known.

11. TOXICOLOGICAL INFORMATION

ACUTE ORAL

Remarks: No data available.

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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RTV21

Silicone Rubber Compound

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

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	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)	



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RTV21 Silicone Rubber Compound

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

SARA (311,312) HAZARD CLASS

Acute Health Hazard

SARA (313) CHEMICALS

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 D2A - Very 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.

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,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).
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