inventing possibilities

Version: 2.0 Revision Date: 05/15/2018

SAFETY DATA SHEET

1. Identification

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Product identifier: RTV 11 DBT

Other means of identification Synonyms: Tin Catalyst (DBT)

Recommended use and restriction on use

Recommended use: Industrial use only. Restrictions on use: Not known.

Manufacturer/Importer/Supplier/Distributor Information

Manufacturer/Importer/Distr ibutor Information	:	Momentive Performance Materials LLC 260 Hudson River Road Waterford NY 12188
Contact person Telephone	:	MomentiveEMEA.productsteward@momentive.com 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

2. Hazard(s) identification

Hazard Classification

Health Hazards	
Skin Corrosion/Irritation	Category 1C
Serious Eye Damage/Eye Irritation	Category 1
Skin sensitizer	Category 1
Germ Cell Mutagenicity	Category 2
Toxic to reproduction	Category 1B
Specific Target Organ Toxicity - Single Exposure	Category 1 ^{1.}
Specific Target Organ Toxicity - Repeated Exposure	Category 1 ^{2.}
Target Organs	
1.thymus	
2.thymus	

Label Elements

Hazard Symbol:



. .		
Hazard Statement: Precautionary	H317; May cause an alle H341; Suspected of caus H360; May damage fertil H370; Causes damage t H372; Causes damage t known> through prolong	in burns and eye damage. ergic skin reaction. sing genetic defects. lity or the unborn child.
Statements		
Prevention:	precautions have been re dust/fume/gas/mist/vapo eat, drink or smoke wher should not be allowed ou	ns before use. Do not handle until all safety ead and understood. Do not breathe rs/spray. Wash thoroughly after handling. Do not n using this product. Contaminated work clothing ut of the workplace. Wear protective g/eye protection/face protection.
Response:	a POISON CENTER/doc contaminated clothing. R contaminated clothing be medical advice/attention. INHALED: Remove pers IF IN EYES: Rinse cautio	mouth. Do NOT induce vomiting. Immediately call etor. IF ON SKIN (or hair): Take off immediately all tinse skin with water [or shower]. Wash efore reuse. If skin irritation or rash occurs: Get . Specific treatment (see on this label). IF on to fresh air and keep comfortable for breathing. ously with water for several minutes. Remove t and easy to do. Continue rinsing. IF exposed or DN CENTER/doctor.
Storage:	Store locked up.	
Disposal:		tainer to an appropriate treatment and disposal h applicable laws and regulations, and product disposal.
Unknown toxicity - Healt Acute toxicity, oral Acute toxicity, dermal Acute toxicity, inhalation, o Acute toxicity, inhalation, o	vapor	0 % 0 % 0 % 0 %
Other hazards which do classification:	not result in GHS	None.

3. Composition/information on ingredients

Substances

Chemical Identity	CAS number	Content in percent (%)*
Dibutyltin Dilaurate	77-58-7	100%
* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume		

* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

4. First-aid measures	
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Ingestion:	If swallowed, do NOT induce vomiting. Give a glass of water. Call a physician or poison control center immediately.
Inhalation:	Move to fresh air. If respiratory problems, artificial respiration/oxygen. Get medical attention.
Skin Contact:	Wash off promptly and flush contaminated skin with water. Promptly remove clothing if soaked through and flush skin with water. Wash contaminated clothing before reuse. Call a physician or poison control center immediately.
Eye contact:	Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. Call a physician or poison control center immediately.
Most important symptoms/effec	ts, acute and delayed
Symptoms:	This product is a corrosive material. Gastric lavage or emesis may be contraindicated. Ingestion or inhalation may result in shock, decreased blood pressure, pulmonary edema, CNS depression, edema of the glottis with asphyxia, and perforation of the esophagus or stomach. Inhalation of vapors or fumes may result in coughing, choking, and CNS effects followed after a 6-8 hour latent period by pulmonary edema with tightness in the chest, air hunger, dizziness, frothy sputum, and cyanosis. Physical findings may include moist rales, low blood pressure, and high pulse pressure. Hemoptysis and dyspnea may continue for several weeks. Prednisolone may reduce esophageal stricture formation.
Hazards:	No data available.
Indication of immediate medical	attention and special treatment needed
Treatment:	Treatment is symptomatic and supportive.
5. Fire-fighting measures	
General Fire Hazards:	Self-contained breathing apparatus and full protective clothing must be worn in case of fire. Use standard firefighting procedures and consider the hazards of other involved materials. Prevent runoff from fire control or dilution from entering streams, sewers, or drinking water supply.
Suitable (and unsuitable) exting	uishing media
Suitable extinguishing media:	All standard extinguishing agents are suitable.
Unsuitable extinguishing media:	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical:	In case of fire, carbon monoxide and carbon dioxide may be formed. Oxides of tin.
Special protective equipment a	nd precautions for firefighters

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Special protective equipment
for fire-fighters:Firefighters must w
contained breathing

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

6. Accidental release measures		
Personal precautions, protective equipment and emergency procedures:	Caution: Contaminated surfaces may be slippery. Avoid contact with skin and eyes. See Section 8 of the SDS for Personal Protective Equipment. Keep out of reach of children.	
Methods and material for containment and cleaning up:	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.	
Environmental Precautions:	Do not allow runoff to sewer, waterway or ground.	
7. Handling and storage		
Precautions for safe handling:	Sensitivity to static discharge is not expected. Do not taste or swallow. Wash thoroughly after handling.	
Conditions for safe storage, including any incompatibilities:	Store in tightly closed original container in a dry and cool place.	
Storage conditions:	No data available.	

8. Exposure controls/personal protection

Control Parameters

Occupational Exposure Limits

Chemical Identity	Туре	Exposure Limit Values	Source
Dibutyltin Dilaurate - as Sn	TWA	0.1 mg/m3	Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2) (07 2009)
	STEL	0.2 mg/m3	Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2) (07 2009)
Dibutyltin Dilaurate - as Sn	STEL	0.2 mg/m3	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (05 2013)
	TWA	0.1 mg/m3	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (05 2013)
Dibutyltin Dilaurate - as Sn	TWA	0.1 mg/m3	Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act) (03 2015)
	STEL	0.2 mg/m3	Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act) (03 2015)
Dibutyltin Dilaurate - as Sn	TWA	0.1 mg/m3	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)
Dibutyltin Dilaurate - as Sn	8 HR ACL	0.1 mg/m3	Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21) (05 2009)
	15 MIN ACL	0.2 mg/m3	Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21) (05 2009)
Dibutyltin Dilaurate - as Sn	TWA	0.1 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (11 2011)
	STEL	0.2 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (11 2011)



RTV 11 DBT US. ACGIH Threshold Limit Values (03 2015) Dibutyltin Dilaurate - as Sn STEL 0.2 mg/m3 0.1 mg/m3 US. ACGIH Threshold Limit Values (03 2015) TWA **Appropriate Engineering** Provide eyewash station and safety shower. Use only with adequate Controls ventilation. 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 nonroutine or emergency situations. Eye/face protection: Wear approved safety goggles. Face shield **Skin Protection** Hand Protection: Chemical resistant gloves Skin protection: Wear suitable protective clothing 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. Observe good industrial hygiene practices. Wash hands after handling. When using do not eat, drink or smoke.

9. Physical and chemical properties

Appearance	
Physical state:	liquid
Form:	liquid
Color:	Colorless
Odor:	Faint
Odor threshold:	No data available.
pH:	Not applicable
Melting point/freezing point:	Not applicable
Initial boiling point and boiling range:	205 °C (1.013 hPa) (other methods)
Flash Point:	191 °C (other methods)
Evaporation rate:	No data available.
Flammability (solid, gas):	No data available.
Upper/lower limit on flammability or explosive	e limits
Flammability limit - upper (%):	19.00 %(V)
Flammability limit - lower (%):	3.30 %(V)
Explosive limit - upper (%):	No data available.
Explosive limit - lower (%):	No data available.
Vapor pressure:	Negligible
Vapor density:	No data available.
Density:	ca. 1.066 g/cm3 (25 °C)
Relative density:	1.28

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Solubility(ies)	
Solubility in water:	Slightly Soluble
Solubility (other):	No data available.
Partition coefficient (n-octanol/water):	4.44 ; pH 6.1 (OECD Test Guideline 107)
Auto-ignition temperature:	> 300 °C
Decomposition temperature:	No data available.
Viscosity, dynamic:	No data available.
Viscosity, kinematic:	No data available.
VOC:	27 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:	Hazardous polymerisation does not occur.
Conditions to avoid:	None known.
Incompatible Materials:	None known.
Hazardous Decomposition Products:	Carbon dioxide Carbon Monoxide. Tin fumes.

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.	
Information on toxicological effects		
Acute toxicity (list all possible routes of exposure)		
Oral Product:	ATEmix: 100 mg/kg	
Dermal		



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Specified substance(s): Dibutyltin Dilaurate	LD 50LD 50 (Rat): > 2,000 mg/kg	
Inhalation Product: Specified substance(s): Dibutyltin Dilaurate	No data available. LC50 (Rat,): 10 mg/l	
Repeated dose toxicity Product:	No data available.	
Skin Corrosion/Irritation Product:	OECD-Guideline 404 (Acute Dermal Irritation/Corrosion) (Rabbit): Corrosive	
Serious Eye Damage/Eye Irrita Product:	tion (Rabbit): Irritating to eyes.	
Respiratory or Skin Sensitizati Product:	on No data available.	
Carcinogenicity Product:	No data available.	
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 ACGIH Carcinogen List:		
No ACGIH Carcinogens: No carcinogenic con	o 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

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Product:	RTV 11 DBT No data available.	
Specific Target Organ Toxicity Product:	- Repeated Exposure No data available.	
	city - Single Exposure: thymus city - Repeated Exposure: thymus	
Aspiration Hazard Product:	No data available.	
Other effects:	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.	
12. Ecological information		
Ecotoxicity:		
Acute hazards to the aquatic	environment:	
Fish Product:	No data available.	
Aquatic Invertebrates Product:	No data available.	
Specified substance(s): Dibutyltin Dilaurate	EC50 (Daphnia magna, 48 h): < 0.463 mg/l Fresh water	
Chronic hazards to the aquat	ic 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.	
Specified substance(s): Dibutyltin Dilaurate	23 % (39 d) The product is not readily biodegradable.	

BOD/COD Ratio Product: No data available.

Bioaccumulative potential Bioconcentration Factor (BCF) MOMENTIVE inventing possibilities

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Product:	No data available.	
Partition Coefficient n-octa		
Product:	Log Kow: 4.44 20.8 °C (OECD Test Guideline 107)	
Mobility in soil:	No data available.	
Known or predicted distribu	ution to environmental compartments	
Dibutyltin Dilaurate	No data available.	
Other adverse effects:	No data available.	
13. Disposal considerations		
General information:	See Section 8 for information on appropriate personal protective equipment. The generation of waste should be avoided or minimized wherever possible. 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.	
Contaminated Packaging:	Dispose of as unused product.	
Contaminated Packaging: 14. Transport information	Dispose of as unused product.	
14. Transport information	Dispose of as unused product.	
14. Transport information		
14. Transport information DOT UN Number:	UN 1760	
14. Transport information DOT UN Number: UN Proper Shipping Name:		
14. Transport information DOT UN Number:	UN 1760 Corrosive liquids, n.o.s.(Dibutyltin Dilaurate)	
14. Transport information DOT UN Number: UN Proper Shipping Name: Transport Hazard Class(es)	UN 1760	
14. Transport information DOT UN Number: UN Proper Shipping Name: Transport Hazard Class(es) Class:	UN 1760 Corrosive liquids, n.o.s.(Dibutyltin Dilaurate) 8	
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14. Transport information DOT UN Number: UN Proper Shipping Name: Transport Hazard Class(es) Class: Label(s): Packing Group:	UN 1760 Corrosive liquids, n.o.s.(Dibutyltin Dilaurate) 8 8 1	
14. Transport information DOT UN Number: UN Proper Shipping Name: Transport Hazard Class(es) Class: Label(s): Packing Group: Environmental Hazards:	UN 1760 Corrosive liquids, n.o.s.(Dibutyltin Dilaurate) 8 8 III Yes	
14. Transport information DOT UN Number: UN Proper Shipping Name: Transport Hazard Class(es) Class: Label(s): Packing Group: Environmental Hazards: Marine Pollutant	UN 1760 Corrosive liquids, n.o.s.(Dibutyltin Dilaurate) 8 8 III Yes	
14. Transport information DOT UN Number: UN Proper Shipping Name: Transport Hazard Class(es) Class: Label(s): Packing Group: Environmental Hazards: Marine Pollutant IMDG UN Number: UN Proper Shipping Name:	UN 1760 Corrosive liquids, n.o.s.(Dibutyltin Dilaurate) 8 8 III Yes No	
14. Transport information DOT UN Number: UN Proper Shipping Name: Transport Hazard Class(es) Class: Label(s): Packing Group: Environmental Hazards: Marine Pollutant IMDG UN Number:	UN 1760 Corrosive liquids, n.o.s.(Dibutyltin Dilaurate) 8 8 8 III Yes No UN 1760 CORROSIVE LIQUID, N.O.S.(Dibutyltin Dilaurate)	
14. Transport information DOT UN Number: UN Proper Shipping Name: Transport Hazard Class(es) Class: Label(s): Packing Group: Environmental Hazards: Marine Pollutant IMDG UN Number: UN Proper Shipping Name: Transport Hazard Class(es)	UN 1760 Corrosive liquids, n.o.s.(Dibutyltin Dilaurate) 8 8 8 III Yes No UN 1760	
14. Transport information DOT UN Number: UN Proper Shipping Name: Transport Hazard Class(es) Class: Label(s): Packing Group: Environmental Hazards: Marine Pollutant IMDG UN Number: UN Proper Shipping Name: Transport Hazard Class(es) Class:	UN 1760 Corrosive liquids, n.o.s.(Dibutyltin Dilaurate) 8 8 III Yes No UN 1760 CORROSIVE LIQUID, N.O.S.(Dibutyltin Dilaurate) 8	
14. Transport information DOT UN Number: UN Proper Shipping Name: Transport Hazard Class(es) Class: Label(s): Packing Group: Environmental Hazards: Marine Pollutant IMDG UN Number: UN Proper Shipping Name: Transport Hazard Class(es) Class: Label(s): EmS No.:	UN 1760 Corrosive liquids, n.o.s.(Dibutyltin Dilaurate) 8 8 III Yes No UN 1760 CORROSIVE LIQUID, N.O.S.(Dibutyltin Dilaurate) 8 8	
14. Transport information DOT UN Number: UN Proper Shipping Name: Transport Hazard Class(es) Class: Label(s): Packing Group: Environmental Hazards: Marine Pollutant IMDG UN Number: UN Proper Shipping Name: Transport Hazard Class(es) Class: Label(s):	UN 1760 Corrosive liquids, n.o.s.(Dibutyltin Dilaurate) 8 8 8 III Yes No UN 1760 CORROSIVE LIQUID, N.O.S.(Dibutyltin Dilaurate) 8 8 8 F-A, S-B	
14. Transport information DOT UN Number: UN Proper Shipping Name: Transport Hazard Class(es) Class: Label(s): Packing Group: Environmental Hazards: Marine Pollutant IMDG UN Number: UN Proper Shipping Name: Transport Hazard Class(es) Class: Label(s): EmS No.: Packing Group:	UN 1760 Corrosive liquids, n.o.s.(Dibutyltin Dilaurate) 8 8 8 III Yes No UN 1760 CORROSIVE LIQUID, N.O.S.(Dibutyltin Dilaurate) 8 8 F-A, S-B III	
14. Transport information DOT UN Number: UN Proper Shipping Name: Transport Hazard Class(es) Class: Label(s): Packing Group: Environmental Hazards: Marine Pollutant IMDG UN Number: UN Proper Shipping Name: Transport Hazard Class(es) Class: Label(s): EmS No.: Packing Group: Limited quantity	UN 1760 Corrosive liquids, n.o.s.(Dibutyltin Dilaurate) 8 8 III Yes No UN 1760 CORROSIVE LIQUID, N.O.S.(Dibutyltin Dilaurate) 8 8 8 F-A, S-B III 5.00L	

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accordance with the IMDG code.

IATA UN Number: Proper Shipping Name: Transport Hazard Class(es): Class: Label(s):	UN 1760 Corrosive liquid, n.o.s.(Dibutyltin Dilaurate) 8 8
Packing Group: Limited quantity	III 1.00L
Excepted quantity	E1
Environmental Hazards: Marine Pollutant	Yes No
Special precautions for user:	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

15. Regulatory information

Canada Federal Regulations

List of Toxic Substances (CEPA, Schedule 1) Not Regulated

Export Control List (CEPA 1999, Schedule 3) Not Regulated

National Pollutant Release Inventory (NPRI) Canada. National Pollutant Release Inventory (NPRI) Substances, Part 5, VOCs with Additional **Reporting Requirements**

Not Regulated NPRI PT5

Canada. National Pollutant Release Inventory (NPRI) (Schedule 1, Parts 1-4) NPRI Not Regulated

Greenhouse Gases

Not Regulated

Controlled Drugs and Substances Act

CA CDSI	Not Regulated
CA CDSII	Not Regulated
CA CDSIII	Not Regulated
CA CDSIV	Not Regulated
CA CDSV	Not Regulated
CA CDSVII	Not Regulated
CA CDSVIII	Not Regulated

Precursor Control Regulations

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On or in compliance with the	Remarks: None.
On or in compliance with the	Remarks: None.
On or in compliance with the	Remarks: None.
On or in compliance with the inventory	Remarks: None.
On or in compliance with the inventory	Remarks: None.
On or in compliance with the inventory	Remarks: None.
Not in compliance with the inventory.	Remarks: None.
On or in compliance with the inventory	Remarks: None.
On or in compliance with the inventory	Remarks: None.
On or in compliance with the inventory	Remarks: None.
On or in compliance with the inventory	Remarks: None.
If purchased from Momentive Performance Materials GmbH in Leverkusen, Germany, all substances in this product have been registered by Momentive Performance Materials GmbH or upstream in our supply chain or are exempt from registration under Regulation (EC) No 1907/2006 (REACH). For polymers, this includes the constituent monomers and other reactants.	Remarks: None.
	 inventory On or in compliance with the inventory Not in compliance with the inventory. On or in compliance with the inventory. In or in compliance with the inventory. In or in compliance with the inventory. In or in compliance with the inventory. If purchased from Momentive Performance Materials GmbH in Leverkusen, Germany, all substances in this product have been registered by Momentive Performance Materials GmbH or upstream in our supply chain or are exempt from registration under Regulation (EC) No 1907/2006 (REACH). For polymers, this includes the constituent monomers and other

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

Issue Date:	05/15/2018
Revision Date:	No data available.
Version #:	2.0
Further Information:	No data available.

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Disclaimer:

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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 longlasting (> 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.

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