

# **SAFETY DATA SHEET**

1. Identification Product identifier: RTV60 Other means of identification Synonyms: SILICONE RUBBER Recommended use and restriction on use Recommended use: Silicone Elastomer Restrictions on use: Not known. Manufacturer/Importer/Distr : Momentive Performance Materials LLC ibutor Information 260 Hudson River Road Waterford NY 12188 commercial.services@momentive.com Contact person : Telephone : General information +1-800-295-2392 **Emergency telephone** number Supplier CHEMTREC : 1-800-424-9300

2. Hazard(s) identification		
Hazard Classification	Not classified	
Label Elements		
Hazard Symbol:	No symbol	
Signal Word:	No signal word.	
Hazard Statement:	Not applicable	
Precautionary Statements	Not applicable	
Hazard(s) not otherwise classified (HNOC):	None.	
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MOME		/E
	inventing	possibilities

## 3. Composition/information on ingredients

#### Mixtures

Chemical Identity	CAS number	Content in percent (%)*	Notes
Red iron oxide	1309-37-1	20 - <50%	# This substance has workplace exposure limit(s).
(1) Cristobalite	14464-46-1	5 - <10%	# This substance has workplace exposure limit(s).
Kieselguhr, soda ash flux- calcined	68855-54-9	1 - <5%	# This substance has workplace exposure limit(s).
Silicic acid, ethyl ester	11099-06-2	1 - <5%	No data available.
(1) QUARTZ	14808-60-7	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.

(1) The respirable particle(s) listed above are inextricably bound within the polymer matrix, and therefore does not present an inhalation hazard during normal use of this product. Tooling or machining of the cured product (sanding, cutting, milling) may release hazardous, respirable substances.

4. First-aid measures	
Ingestion:	DO NOT induce vomiting. Get medical attention immediately. Do not give victim anything to drink if he is unconscious. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.
Inhalation:	Move into fresh air and keep at rest. Get medical attention if symptoms occur.
Skin Contact:	Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water. Get medical attention if symptoms occur.
Eye contact:	Get medical attention if symptoms occur. If in eyes, hold eyes open, flood with water for at least 15 minutes and see a doctor.
Most important symptoms	/effects, acute and delayed
Symptoms:	None known.
Hazards:	No data available.
Indication of immediate m	edical attention and special treatment needed

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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) extingu	ishing 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. 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 an	d 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.		

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. Do not get in eyes, on skin, on clothing. Use personal protective equipment as required. Wash hands after handling.
Conditions for safe storage, including any incompatibilities:	Keep container closed. Keep away from sources of ignition - No smoking. Use original container or packaging of similar material of construction

## 8. Exposure controls/personal protection

#### **Control Parameters**

Occupati	onal	Exp	osure	Limits

Chemical Identity	Туре	Exposure Limit Values	Source
Red iron oxide - Respirable fraction.	TWA	5 mg/m3	US. ACGIH Threshold Limit Values, as amended (03 2015)
Red iron oxide - Dust and fume as Fe	REL	5 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards, as amended (2010)
Red iron oxide - Fume.	PEL	10 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended (02 2006)
	TWA	10 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended (1989)
	TWA	10 mg/m3	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A, as amended (06 2008)
	TWA PEL	5 mg/m3	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants, as amended (01 2015)
Red iron oxide - Total dust.	TWA	50 millions of particles per cubic foot of air	US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (03 2016)
Red iron oxide - Respirable fraction.	TWA	5 mg/m3	US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (03 2016)
	TWA	15 millions of particles per cubic foot of air	US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (03 2016)
Red iron oxide - Total dust.	TWA	15 mg/m3	US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (03 2016)
Red iron oxide	IDLH	2,500 mg/m3	US. NIOSH. Immediately Dangerous to Life or Health (IDLH) Values, as amended (10 2017)
(1) Cristobalite - Respirable fraction.	TWA	0.025 mg/m3	US. ACGIH Threshold Limit Values, as amended (03 2015)
(1) Cristobalite - Respirable dust.	REL	0.05 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards, as amended (2016)
(1) Cristobalite - Respirable dust.	TWA	0.05 mg/m3	US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053), as amended (03 2016)
	OSHA_AC T	0.025 mg/m3	US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053), as amended (03 2016)
(1) Cristobalite - Respirable dust.	PEL	0.05 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended (03 2016)
	TWA	0.05 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended (1989)
(1) Cristobalite - Particulate.	ANESL	0.27 µg/m3	US. Texas. Effects Screening Levels (Texas

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(1) Cristobalite - Respirable         TWA PEL         0.05 mg/m3         US: California Code of Regulations, Title 8, arrended (01 2015)           (1) Cristobalite - Respirable.         TWA         1.2 millions         CS: OSH Table Z-3 (29 CPR 1910.1000), as arrended (2000)           (1) Cristobalite - Respirable.         TWA         0.05 mg/m3         US: OSH Table Z-3 (29 CPR 1910.1000), as arrended (2000)           (1) Cristobalite - Respirable         TWA         0.05 mg/m3         US: OSH Table Z-3 (29 CPR 1910.1000), as arrended (10 20 17)           (1) Cristobalite - Respirable         TWA         0.05 mg/m3         US: OSHA Table Z-3 (29 CPR 1910.1000), as arrended (2000)           (1) Cristobalite - Respirable         TWA         0.050 mg/m3         US: Totass. Effects Screening Lavels (10 20 17)           (1) Cristobalite - Particulate.         ST ESL         14 µg/m3         US: Totass. Effects Screening Lavels (7 exas the complication of cultific total common theoremental Coality), as arrended (2000)         arrended (2000)         arrended (2000)           (2) CSHA Table Z-3 (29 CPR 1910.1000), as arrended (02 CO0)         arrended (2000)         arrended (2000)         arrended (2000)           (2) CSHA Table Z-3 (29 CPR 1910.1000), as arrended (02 CO1)         arrended (2000)         arrended (2000)         arrended (2000)           (2) CSHA Table Z-3 (29 CPR 1910.1000), as arrended (2000)         arrended (2000)         arrended (2000)         arrended (2000)				Commission on Environmental Quality), as amended (11 2016)
dust. Section 5155. Arborne Contaminants, as amended (02015) (1) Cristobalite - Respirable. TWA 1.2 millions of particles per cubic foot of ariticles (2000) (1) Cristobalite - Respirable TWA 0.05 mg/m US, OSHA Table Z-3 (29 CPR 1910.1000), as amended (2000) (1) Cristobalite - Respirable TWA 0.05 mg/m US, OSHA Table Z-3 (29 CPR 1910.1000), as amended (2000) (1) Cristobalite - Respirable TWA 0.050 mg/m US, OSHA Table Z-3 (29 CPR 1910.1000), as amended (2000) (1) Cristobalite - Particulate. ST ESL 14 µg/m US, TOSHA Table Z-3 (29 CPR 1910.1000), as amended (2010) (1) Cristobalite - Particulate. ST ESL 14 µg/m US, TOSHA Table Z-3 (29 CPR 1910.1000), as amended (2010) (1) Cristobalite - Particulate. ST ESL 14 µg/m US, TOSHA Table Z-3 (29 CPR 1910.1000), as amended (2010) (1) Cristobalite - Particulate. ST ESL 14 µg/m US, TOSHA Table Z-3 (29 CPR 1910.1000), as amended (2010) (1) Cristobalite - Particulate. TWA 20 millions of particles per cubic foot of air UVA 0.8 mg/m US, OSHA Table Z-3 (29 CPR 1910.1000), as amended (2000) US, OSHA Table Z-3 (29 CPR 1910.1000), as amended (2000) US, OSHA Table Z-3 (29 CPR 1910.1000), as amended (2000) US, OSHA Table Z-3 (29 CPR 1910.1000), as amended (2000) US, OSHA Table Z-3 (29 CPR 1910.1000), as amended (02 C00) US, OSHA Table Z-3 (29 CPR 1910.1000), as amended (02 C00) US, Toxas, Effects Screening Levels (Texas Commission on Environmental Quality), as amended (02 C01) US, Toxas, Effects Screening Levels (Texas Commission on Environmental Quality), as amended (02 C01) US, Toxas, Effects Screening Levels (Texas Commission on Environmental Quality), as amended (02 C01) US, Toxas, Effects Screening Levels (Texas Commission on Environmental Quality), as amended (02 C01) US, Toxas, Effects Screening Levels (Texas Commission on Environmental Quality), as amended (02 C01) US, Toxas, Effects Screening Levels (Texas Commission on Environmental Quality), as amended (02 C01) US, Toxas, Effects Screening Levels (Texas Commission on Environmental Quality), as amended (02 C01) US, Toxas, Effec	(1) Cristobalite - Respirable	TWA PEL	0.05 mg/m3	
(1) Cristobalite - Respirable.       TWA       1.2 millions of particles per cubic foot of air amended (2000)         (1) Cristobalite       IVVA       0.05 mg/m3 amended (2000)         (1) Cristobalite       DLH       25 mg/m3 amended (2000)         (1) Cristobalite       DLH       25 mg/m3 amended (2000)         (1) Cristobalite       DLH       25 mg/m3 amended (2000)         (1) Cristobalite - Respirable       TWA       0.050 mg/m3 amended (2000)         (1) Cristobalite - Particulate.       ST ESL       14 µg/m3 US. Toxas. Effects Screengiol Levels (Texas amended (06 2019).         (1) Cristobalite - Particulate.       ST ESL       14 µg/m3 US. Toxas. Effects Screening Levels (Texas amended (2010).         (2) Cristobalite - Particulate.       TWA       20 millions of US. NOSH Proket Gude to Chemical Hazards, as amended (2010).         (2) Cristobalite - Particulate.       TWA       20 millions of US. SNOSH Proket Gude to Chemical Hazards (2000)         (2) Cristobalite - Particulate.       TWA       20 millions of US. NOSH Proket Gude to Chemical Hazards amended (2000)         (2) Cristobalite - Screening Levels (Texas Cristes Screening Levels (Texas Grasting Amended (10 2017)       (2) Cristobalite - Particulate.         (2) Cristobalite - Screening Levels (Texas Grasting Amended (10 2017)       (2) Cristobalite - Cristobalite - Cristobalite - Cristobalite - Cristobali	dust.			
(1) Cristobalite - Respirable.       TWA       1.2 millions of particles per cubic foot of air amended (2000)         (1) Cristobalite       IVVA       0.05 mg/m3 amended (2000)         (1) Cristobalite       DLH       25 mg/m3 amended (2000)         (1) Cristobalite       DLH       25 mg/m3 amended (2000)         (1) Cristobalite       DLH       25 mg/m3 amended (2000)         (1) Cristobalite - Respirable       TWA       0.050 mg/m3 amended (2000)         (1) Cristobalite - Particulate.       ST ESL       14 µg/m3 US. Toxas. Effects Screengiol Levels (Texas amended (06 2019).         (1) Cristobalite - Particulate.       ST ESL       14 µg/m3 US. Toxas. Effects Screening Levels (Texas amended (2010).         (2) Cristobalite - Particulate.       TWA       20 millions of US. NOSH Proket Gude to Chemical Hazards, as amended (2010).         (2) Cristobalite - Particulate.       TWA       20 millions of US. SNOSH Proket Gude to Chemical Hazards (2000)         (2) Cristobalite - Particulate.       TWA       20 millions of US. NOSH Proket Gude to Chemical Hazards amended (2000)         (2) Cristobalite - Screening Levels (Texas Cristes Screening Levels (Texas Grasting Amended (10 2017)       (2) Cristobalite - Particulate.         (2) Cristobalite - Screening Levels (Texas Grasting Amended (10 2017)       (2) Cristobalite - Cristobalite - Cristobalite - Cristobalite - Cristobali				amended (01 2015)
per cibic foot of air         per cibic foot of air         per cibic foot samended (2000)           (1) Cristobalite         IDLH         25 mg/m3         US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (2000)           (1) Cristobalite - Respirable dust.         IDLH         25 mg/m3         US. NIOSH, Immediately Dangerous to Life or health (IDLH) Values, as amended (10 2017)           (1) Cristobalite - Particulate.         ST ESL         14 µg/m3         US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended (2010)           (1) Cristobalite - Particulate.         ST ESL         14 µg/m3         US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended (2000)           (2) Of millions of particles per cubic foot of         US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (2000)         amended (2000)           TWA         0.8 mg/m3         US. SOSHA Table Z-3 (29 CFR 1910.1000), as amended (06 2018)         amended (06 2018)           TWA         0.8 mg/m3         US. NOSH, Immediately Dangerous to Life or Health (DLH) Values, as amended (10 2017)           Kieselguhr, soda ash flux- cacined - Particulate.         21 µg/m3         US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended (06 2018)           Kieselguhr, soda ash flux- cacined - Respirable         TWA         3 mg/m3         US. ACGH Threshold Limit Values, as amended (06 2018)           Kieselguhr, soda ash flux- cacined - Resp	(1) Cristobalite - Respirable.	TWA		US. OSHA Table Z-3 (29 CFR 1910.1000), as
of air         of air           TWA         0.05 mg/m3         US. OSHA Table Z-3 (29 CFR 1910.1000), as arrended (2000)           (1) Cistobalite         DLH         25 mg/m3         US. NOSH. Immediately. Dangerous to Life or Health (DLH) Values, as amended (10 2017)           (1) Cistobalite - Respirable         TWA         0.050 mg/m3         US. Tomssee, CEL Scouppointol Exposure Limits, Table Z1A, as amended (01 2019)           (1) Cistobalite - Particulate.         ST ESL         14 µg/m3         US. Tomassee, CEL Scouppointel Quality), as arrended (06 2018)           (1) Cistobalite - Particulate.         ST ESL         14 µg/m3         US. Tomas amended (2010)           (1) Cistobalite - Particulate.         TWA         20 millions of particles per cubic foot of altr         US. Tomas amended (2000)           10 LH         3,000 mg/m3         US. Towas Effects Screening Levels (Texas Commission on Environmental Quality), as arrended (2000)           10 LH         3,000 mg/m3         US. Towas Effects Screening Levels (Texas Commission on Environmental Quality), as arrended (06 2018)           10 sciencel - Particulate.         ST ESL         27 µg/m3         US. Towas Effects Screening Levels (Texas Commission on Environmental Quality), as arrended (06 2018)           10 sciencel - Total dust.         TWA         3 mg/m3         US. ACOH Threshold Limit Values, as arrended (01 2017)           11 Stisseliguhr, soda ash flux- calcined - Total dust.				amended (2000)
TWA         0.05 mg/m3         US         CSI-NA Table 2-3 (29 CFR 1910.1000), as amended (2000)           (1) Cristobalite         IDLH         25 mg/m3         US         NIGSH. Firmediate/Dangerous to Life or health (0LH) Values, as amended (10 2017)           (1) Cristobalite - Particulate.         ST ESL         14 µg/m3         US         Texas amended (10 2017)           (1) Cristobalite - Particulate.         ST ESL         14 µg/m3         US         Texas amended (12 001)           (1) Cristobalite - Particulate.         ST ESL         14 µg/m3         US         Texas amended (12 001)           (1) Cristobalite - Particulate.         ST ESL         14 µg/m3         US         Texas amended (2010)           (20 millions of particles per cubic foot of cubic f				
armended (2000)           10 Cristobalite         IDLH         25 mg/r3         US. NIOSH. Immediately. Dangerous to Life or Health (IDLH) Values, as amended (10 2017)           (1) Cristobalite - Respirable         TWA         0.050 mg/r3         US. Tomessee, OEL S. Occupational Exposure Limits, Table 21.4, as amended (01 2019)           (1) Cristobalite - Particulate.         ST ESL         14 µg/r3         US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended (06 2018)           Kieselguhr, soda ash flux- calcined         REL         6 mg/r3         US. NIOSH: Pocket Quide to Chemical Hazardis, as amended (2000)           TWA         20 millions of particles pp         US. NIOSH: Table Z-3 (29 CFR 1910.1000), as amended (2000)           TWA         0.8 mg/r3         US. NIOSH: Immediately. Dangerous to Life or health (DLH) Values, as amended (10 2017)           Kieselguhr, soda ash flux- calcined - Particulate.         AN ESL         2 µg/r3         US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended (06 2018)         Stress. Effects Screening Levels (Texas Commission on Environmental Quality), as amended (06 2019)         Stress. Effects Screening Levels (Texas Commission on Environmental Quality), as amended (06 2018)         Str. Keselguhr, soda ash flux- calcined - Intable particles.         Str. Keselguhr, soda ash flux- calcined - Intable particles pp         Str. Keselguhr, soda ash flux- calcined - Total dust.         TWA         10 mg/r3         US. ACCHI Threshold Limit Values, as		<b>T</b> A/A		
(1) Cistobalite     IDLH     25 mg/m3     US. NIOSH. Immediately Dangerous to Life or Health (IDLH) Values, as amended (10 2017)       (1) Cistobalite - Respirable dust.     TWA     0.050 mg/m3     US. Tennessee, OEL. Occupational Exposure Limits, Table 21A, as amended (01 2019)       (1) Cistobalite - Particulate.     ST ESL     14 µg/m3     US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended (06 2018)       (2) Cistobalite - Particulate.     REL     6 mg/m3     US. NOSH. Table 2-3 (29 CFR 1910.1000), as amended (2000)       (2) Commission on Environmental Quality).     amended (2000)     amended (2000)       (2) Commission on Environmental Quality).     amended (2000)     amended (2000)       (2) Commission on Environmental Quality).     amended (2000)     amended (2000)       (2) Commission on Environmental Quality).     amended (2000)     Commission on Environmental Quality).       (2) Commission on Environmental Quality).     amended (02017)     US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality).       (2) Commission on Environmental Quality).     amended (02016)     US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality).       (2) Commission and Environmental Quality).     amended (02010)     US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality).       (3) Commission and Environmental Quality).     amended (01 2012)     US. Texas. Effects Screening Levels (Texas Commission on Environmen		IVVA	0.05 mg/m3	
Health (DL-H) Values, as amended (10 2017)           (1) Cristobalite - Respirable         TWA         0.050 mg/m3         US. Tennessee. CBLs. Occupational Exposure Limits, Table Z1A, as amended (2012)           (1) Cristobalite - Particulate.         ST ESL         14 µg/m3         US. NOSH: Posted Cuide to Chemical Heazards, as amended (010)           Kleselguhr, soda ash flux- calcined         REL         6 mg/m3         US. NOSH: Posted Cuide to Chemical Heazards, as amended (2010)           TWA         20 millons of particles, as amended (2000)         US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (2000)           TWA         0.8 mg/m3         US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (2000)           US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (2000)         US. NOSH. Immediately Dangerous to Life or Health (DL-H) Values, as amended (10 2017)           Kleselguhr, soda ash flux- calcined - Particulate.         AN ESL         2 µg/m3         US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended (06 2018)           Kleselguhr, soda ash flux- calcined - Respirable particles.         TWA         3 mg/m3         US. ACGH Threshold Limit Values, as amended (01 2021)           Kleselguhr, soda ash flux- calcined - Respirable particles.         TWA         10 mg/m3         US. ACGH Threshold Limit Values, as amended (01 2021)           Kleselguhr, soda ash flux- calcined - Respirable         TWA         10 mg/m3         US. ACGH Threshold Limit Valu			05	amended (2000)
(1) Cristobalite - Respirable dust.       TWA       0.050 mg/m3       US: Tennessee. OELs. Occupational Exposure Limits, Table Z1A, as amended (01 2019)         (1) Cristobalite - Particulate.       ST ESL       14 µg/m3       US: Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended (08 2018)         Keselguhr, soda ash flux-calcined       REL       6 mg/m3       US: MCSH Pocket Guide to Chemical Hazards, as amended (2010)         US: OSHA Table Z-3 (29 CFR 1910.1000), as amended (2000)       amended (2000)       amended (2000)         US: NDSH Pocket Guide to Chemical Hazards, as amended (2000)       amended (2000)       amended (2000)         US: NDSH Table Z-3 (29 CFR 1910.1000), as amended (2000)       amended (2000)       US: NDSH Tmodelstely Dangerous to Life or Health (DLH) Values, as amended (02 017)         Kieselguhr, soda ash flux-calcined - Particulate.       AN ESL       2 µg/m3       US: Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended (06 2018)         Kieselguhr, soda ash flux-calcined - Respirable particles.       ST ESL       27 µg/m3       US: ACGH Threshold Limit Values, as amended (06 2018)         Kieselguhr, soda ash flux-calcined - Inhabale particles.       TWA       10 mg/m3       US: CSHA Table Z-1A (29 CFR 1910.1000), as amended (01 2021)         Kieselguhr, soda ash flux-calcined - Inhabale particles.       TWA       10 mg/m3       US: CGH Threshold Limit Values, as amended (01 2021)	(1) Cristobalite	IDLH	25 mg/m3	Health (IDLH) Values, as amended (10 2017)
dust.       Limits, Table Z1A, as amended (01 2019)         (1) Cristoballe - Particulate.       ST ESL       14 µg/m3       US. Texas. Effects Screening Levels (Texas Carmission on Environmental Quality), as anended (06 2018)         Kleselguhr, soda ash flux-calcined       REL       6 mg/m3       US. NIOSH: Pocket Quide to Chemical Heazards, as amended (2010)         Line       100       TWA       20 millons of particles, as amended (2010)       us: OSHA Table Z-3 (29 CFR 1910.1000), as amended (2000)         Line       100       0.8 mg/m3       US. NIOSH. Trable Z-3 (29 CFR 1910.1000), as amended (2000)         Line       100.H       3,000 mg/m3       US. NIOSH. Immediately Dangerous to Life or health (DL-H) Values, as amended (10 2017)         Kleselguhr, soda ash flux-calcined - Particulate.       AN ESL       2 µg/m3       US. NIOSH. Immediately Dangerous to Life or health (DL-H) Values, as amended (10 2017)         Kleselguhr, soda ash flux-calcined - Particulate.       AN ESL       2 µg/m3       US. NIOSH. Immediately Calcined (08 2018)         Kleselguhr, soda ash flux-calcined - Respirable particles.       TWA       3 mg/m3       US. ACGH Threshold Limit Values, as amended (01 2021)         Kleselguhr, soda ash flux-calcined - Respirable particles.       100 mg/m3       US. ACGH Threshold Limit Values, as amended (01 2021)         Kleselguhr, soda ash flux-calcined - Respirable       100 mg/m3       US. ACGH Threshold Limit Values, as amended (12010),	(1) Cristobalite - Respirable	TWA	0.050 ma/m3	US. Tennessee, OELs, Occupational Exposure
Commission on Environmenial Quality), as amended (06 2018)           Kieselguhr, soda ash flux- calcined         REL         6 mg/m3         US. NOSH. Probert Guide to Chemical Hazards, as amended (2010)           TWA         20 millions of particles per cubic foot of air         US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (2000)           TWA         0.8 mg/m3         US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (2000)           IDLH         3,000 mg/m3         US. NOSH. Immediately Dangerous to Life or Health (BLH) Values, as amended (10 2017)           Kieselguhr, soda ash flux- calcined - Particulate.         AN ESL         2 µg/m3         US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended (06 2018)           Kieselguhr, soda ash flux- calcined - Respirable         TWA         3 mg/m3         US. ACCH Threshold Limit Values, as amended (10 2021)           Kieselguhr, soda ash flux- calcined - Inhalable particles.         TWA         10 mg/m3         US. ACCH Threshold Limit Values, as amended (10 2021)           Kieselguhr, soda ash flux- calcined - Inhalable particles.         TWA         15 mg/m3         US. ACCH Threshold Limit Values, as amended (10 2021)           Kieselguhr, soda ash flux- calcined - Inhalable particles.         TWA         15 mg/m3         US. ACCH Threshold Limit Values, as amended (10 2021)           Kieselguhr, soda ash flux- calcined - Respirable         TWA         15 mg/m3         US. Cell Trinsesce OLLS. Occup	dust.		-	Limits, Table Z1A, as amended (01 2019)
Image: Calcined         Image: Cal	(1) Cristobalite - Particulate.	ST ESL	14 µg/m3	
Kieselguhr, soda ash flux- calcined         REL         6 mg/m3         US. NOSH Proket Guide to Chemical Hazards, as amended (2010)           TWA         20 milions of ubic food air         US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (2000)           TWA         0.8 mg/m3         US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (2000)           TWA         0.8 mg/m3         US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (2000)           IDLH         3,000 mg/m3         US. NOSH. Immediately Dangerous to Life or Health (BLH) Values, as amended (10 2017)           Kieselguhr, soda ash flux- calcined - Particulate.         AN ESL         2 µg/m3         US. Texas. Effects Screening Levels (Texas cormission on Environmental Quality), as amended (06 2018)           Kieselguhr, soda ash flux- calcined - Respirable         TWA         3 mg/m3         US. ACGIH Threshold Limit Values, as amended (01 2021)           Kieselguhr, soda ash flux- calcined - Inhalable particles.         TWA         10 mg/m3         US. ACGIH Threshold Limit Values, as amended (10 2021)           Kieselguhr, soda ash flux- calcined - Total dust.         TWA         15 mg/m3         US. ACGIH Threshold Limit Values, as amended (1989)           Kieselguhr, soda ash flux- calcined - Total dust.         TWA         15 mg/m3         US. CGHA Table Z-1A (29 CFR 1910.1000), as amended (1989)           Kieselguhr, soda ash flux- calcined - Total dust.         TWA         5 mg/m3         US. Tennessee OLS.				
calcined         Hzards, as amended (2010)           TWA         20 millions of particles per cubic foot of         US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (2000)           TWA         0.8 mg/m3         US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (2000)           DLH         3,000 mg/m3         US. NOSHA Table Z-3 (29 CFR 1910.1000), as amended (02018)           Kieselguhr, soda ash flux- calcined - Particulate.         AN ESL         2 µg/m3           ST ESL         27 µg/m3         US. Texas. Effects Screening Levels (Texas Cormission on Environmental Quality), as amended (02 2018)           Kieselguhr, soda ash flux- calcined - Respirable particles.         TWA         3 mg/m3         US. ACGIH Threshold Limit Values, as amended (01 2021)           Kieselguhr, soda ash flux- calcined - Inhable particles.         TWA         10 mg/m3         US. ACGIH Threshold Limit Values, as amended (01 2021)           Kieselguhr, soda ash flux- calcined - Inhable particles.         TWA         10 mg/m3         US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended (1989)           Kieselguhr, soda ash flux- calcined - Total dust.         TWA         5 mg/m3         US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended (19201)           Kieselguhr, soda ash flux- calcined - Total dust.         TWA         5 mg/m3         US. CostRA Table Z-1-A (29 CFR 1910.1000), as amended (19201)           Kieselguhr, soda ash flux- calcined - Respirable         TWA         5				
TWA     20 millions of particles per cubic foot of air     US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (2000)       TWA     0.8 mg/m3     US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (2000)       IVH     0.8 mg/m3     US. NOSH. Immediately Dangerous to Life or Health (DLV) Values, as amended (10 2017)       Kieselguhr, soda ash flux- calcined - Particulate.     AN ESL     2 µg/m3     US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended (06 2018)       Kieselguhr, soda ash flux- calcined - Respirable particles.     TWA     3 mg/m3     US. ACGH Threshold Limit Values, as amended (01 2021)       Kieselguhr, soda ash flux- calcined - Inhalable particles.     TWA     10 mg/m3     US. ACGH Threshold Limit Values, as amended (19 2021)       Kieselguhr, soda ash flux- calcined - Inhalable particles.     TWA     15 mg/m3     US. CSFH Table Z-1-A (29 CFR 1910.1000), as amended (1989)       Kieselguhr, soda ash flux- calcined - Total dust.     TWA     5 mg/m3     US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A, as amended (01 2019)       Kieselguhr, soda ash flux- calcined - Total dust.     TWA     5 mg/m3     US. Calfornia Code of Regulations, Tifle 8, Section 5155. Airborne Contaminants, as amended (12 2017)       Kieselguhr, soda ash flux- calcined - Total dust.     TWA     15 mg/m3     US. Calfornia Code of Regulations, Tifle 8, Section 5155. Airborne Contaminants, as amended (12 2017)       Kieselguhr, soda ash flux- calcined - Total dust.     TWA     15 mg/m3		REL	6 mg/m3	
particles price         amended (2000)           TWA         0.8 mg/m3         US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (2000)           DLH         3,000 mg/m3         US. NOSHA Table Z-3 (29 CFR 1910.1000), as amended (2000)           Kleselguhr, soda ash flux-calcined - Particulate.         AN ESL         2 µg/m3         US. NOSHA Table Z-3 (29 CFR 1910.1000), as amended (06 2018)           ST ESL         2 µg/m3         US. Texas. Effects Screening Levels (Texas Cormission on Environmental Quality), as amended (06 2018)           Kleselguhr, soda ash flux-calcined - Respirable particles.         TWA         3 mg/m3         US. ACGH Threshold Limit Values, as amended (06 2018)           Kleselguhr, soda ash flux-calcined - Inhalable particles.         TWA         10 mg/m3         US. ACGH Threshold Limit Values, as amended (01 2021)           Kleselguhr, soda ash flux-calcined - Respirable         TWA         10 mg/m3         US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended (01 2021)           Kleselguhr, soda ash flux-calcined - Respirable         TWA         15 mg/m3         US. CostPat Table Z-1-A (29 CFR 1910.1000), as amended (1989)           Kleselguhr, soda ash flux-calcined - Respirable         TWA         5 mg/m3         US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A, as amended (01 2019)           Kleselguhr, soda ash flux-calcined - Total dust.         TWA         15 mg/m3         US. Calfornia Code of Regulations, Title 8, Section 5155. Airborne	calcined			Hazards, as amended (2010)
cubic foot of air         cubic foot of ar           TWA         0.8 mg/m3         US: OSHA Table Z-3 (29 CFR 1910.1000), as amended (2000)           IDLH         3,000 mg/m3         US: NDSH. Immediately Dangerous to Life or Health (DLH) Values, as amended (10 2017)           Kieselguhr, soda ash flux- calcined - Particulate.         AN ESL         2 µg/m3         US: Texas. Effects Screening Levels (Texas Cormission on Environmental Quality), as amended (06 2018)           Kieselguhr, soda ash flux- calcined - Respirable particles.         TWA         3 mg/m3         US: ACGH Threshold Limit Values, as amended (06 2018)           Kieselguhr, soda ash flux- calcined - Inhalable particles.         TWA         10 mg/m3         US: ACGH Threshold Limit Values, as amended (01 2021)           Kieselguhr, soda ash flux- calcined - Inhalable particles.         TWA         10 mg/m3         US: OSHA Table Z-1-A (29 CFR 1910.1000), as amended (1989)           Kieselguhr, soda ash flux- calcined - Inhalable particles.         TWA         5 mg/m3         US: CGH Table Z-1-A (29 CFR 1910.1000), as amended (1989)           Kieselguhr, soda ash flux- calcined - Total dust.         TWA         5 mg/m3         US: Tennessee OELs. Occupational Exposure Limits, Table Z1A, as amended (01 2019)           Kieselguhr, soda ash flux- calcined - Total dust.         TWA         5 mg/m3         US: California Code of Regulations, Title 8, Section 5155. Airborne Contaminants, as amended (12 2017)           Kieselguhr, soda ash flu		TWA		
air         air           TWA         0.8 mg/m3           US: OSHA Table Z-3 (29 CFR 1910.1000), as amended (2000)           IDLH         3.000 mg/m3           US: INCSH Immediately Dangerous to Life or Health (IDLH) Values, as amended (10 2017)           Kieselguhr, soda ash flux-calcined - Particulate.         AN ESL           ST ESL         27 µg/m3           Kieselguhr, soda ash flux-calcined - Respirable particles.         TWA           Steselguhr, soda ash flux-calcined - Respirable particles.         TWA           Kieselguhr, soda ash flux-calcined - Inhalable particles.         TWA           Kieselguhr, soda ash flux-calcined - Total dust.         TWA           Kieselguhr, soda ash flux-calcined - Respirable         TWA           TWA         10 mg/m3         US. CGHT Thele Z-1-A (29 CFR 1910.1000), as amended (1989)           Kieselguhr, soda ash flux-calcined - Respirable         TWA         15 mg/m3           Kieselguhr, soda ash flux-calcined - Total dust.         TWA         5 mg/m3         US. Tennessee. OELs. Occcupa				amended (2000)
TWA     0.8 mg/m3     US: CSHA Table Z-3 (29 CFR 1910.1000), as amended (2000)       IDLH     3,000 mg/m3     US: NDSH. Immediately Dangerous to Life or Health (DLH) Values, as amended (10 2017)       Kieselguhr, soda ash flux- calcined - Particulate.     AN ESL     2 µg/m3     US: Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended (06 2018)       Kieselguhr, soda ash flux- calcined - Respirable     TWA     3 mg/m3     US: ACGH Threshold Limit Values, as amended (01 2021)       Kieselguhr, soda ash flux- calcined - Intable particles.     TWA     10 mg/m3     US: ACGH Threshold Limit Values, as amended (01 2021)       Kieselguhr, soda ash flux- calcined - Total dust.     TWA     10 mg/m3     US: ACGH Threshold Limit Values, as amended (10 2021)       Kieselguhr, soda ash flux- calcined - Total dust.     TWA     15 mg/m3     US: COSHA Table Z-1-A (29 CFR 1910.1000), as amended (1989)       Kieselguhr, soda ash flux- calcined - Total dust.     TWA     5 mg/m3     US: Tennessee. OELs. Occupational Exposure Limits, Table Z1-A (29 CFR 1910.1000), as amended (12 2017)       Kieselguhr, soda ash flux- calcined - Total dust.     TWA     5 mg/m3     US: Tennessee. OELs. Occupational Exposure Limits, Table Z1-A (29 CFR 1910.1000), as amended (12 2017)       Kieselguhr, soda ash flux- calcined - Total dust.     TWA     5 mg/m3     US: California Code of Regulations, Title 8, Section 5155. Airborne Contaminants, as amended (12 2017)       Kieselguhr, soda ash flux- calcined - Total dust.     TWA <td></td> <td></td> <td></td> <td></td>				
IDLH         amended (2000)           Kieselguhr, soda ash flux- calcined - Particulate.         AN ESL         2 µg/m3         US. NIOSH. Immediately Dangerous to Life or Health (IDLH) Values, as amended (10 2017)           Kieselguhr, soda ash flux- calcined - Respirable particles.         AN ESL         2 µg/m3         US. Texas. Effects Screening Levels (Texas Cormission on Environmental Quality), as amended (06 2018)           Kieselguhr, soda ash flux- calcined - Respirable particles.         TWA         3 mg/m3         US. ACCIH Threshold Limit Values, as amended (01 2021)           Kieselguhr, soda ash flux- calcined - Inhalable particles.         TWA         10 mg/m3         US. ACCIH Threshold Limit Values, as amended (01 2021)           Kieselguhr, soda ash flux- calcined - Inhalable particles.         TWA         15 mg/m3         US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended (1989)           Kieselguhr, soda ash flux- calcined - Respirable         TWA         5 mg/m3         US. Tennessee. OELS. Occupational Exposure Limits, Table Z-1-A (29 CFR 1910.1000), as amended (1989)           Kieselguhr, soda ash flux- calcined - Total dust.         TWA         15 mg/m3         US. Tennessee. OELS. Occupational Exposure Limits, Table Z-1A, as amended (01 2019)           Kieselguhr, soda ash flux- calcined - Total dust.         TWA         15 mg/m3         US. California Code of Regulations, Tifle 8, Section 5155. Airborne Contaminants, as amended (12 2017)           Kieselguhr, soda ash flux- calcined - Respirable <t< td=""><td></td><td></td><td></td><td>US OSHA Table 7-3 (20 CER 1010 1000) as</td></t<>				US OSHA Table 7-3 (20 CER 1010 1000) as
IDLH         3,000 mg/m3         US. NOSH. Immediately. Dangerous to Life or Health (IDLH) Values, as amended (10 2017)           Kieselguhr, soda ash flux- calcined - Particulate.         AN ESL         2 µg/m3         US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended (06 2018)           Kieselguhr, soda ash flux- calcined - Respirable particles.         TWA         3 mg/m3         US. ACCIH Threshold Limit Values, as amended (06 2018)           Kieselguhr, soda ash flux- calcined - Inhalable particles.         TWA         10 mg/m3         US. ACCIH Threshold Limit Values, as amended (01 2021)           Kieselguhr, soda ash flux- calcined - Inhalable particles.         TWA         10 mg/m3         US. ACCIH Threshold Limit Values, as amended (01 2021)           Kieselguhr, soda ash flux- calcined - Inhalable particles.         TWA         15 mg/m3         US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended (1989)           Kieselguhr, soda ash flux- calcined - Total dust.         TWA         5 mg/m3         US. Centrable Z-1.A (29 CFR 1910.1000), as amended (1989)           Kieselguhr, soda ash flux- calcined - Total dust.         TWA         5 mg/m3         US. Cocupational Exposure Limits, Table Z-1.A (29 CFR 1910.1000), as amended (01 2019)           Kieselguhr, soda ash flux- calcined - Total dust.         TWA         15 mg/m3         US. Cocupational Exposure Limits, Table Z-1A, as amended (01 2019)           Kieselguhr, soda ash flux- calcined - Total dust.         TWA PEL			0.0 mg/mb	
Health (DL-P) Values, as amended (10 2017)           Kieselguhr, soda ash flux- calcined - Particulate.         AN ESL         2 μg/m3         US. Texas. Effects Screening Levels (Texas Cormission on Environmental Quality), as amended (06 2018)           Kieselguhr, soda ash flux- calcined - Respirable particles.         TWA         3 mg/m3         US. ACGIH Threshold Limit Values, as amended (06 2018)           Kieselguhr, soda ash flux- calcined - Inhalable particles.         TWA         10 mg/m3         US. ACGIH Threshold Limit Values, as amended (12 021)           Kieselguhr, soda ash flux- calcined - Inhalable particles.         TWA         10 mg/m3         US. ACGIH Threshold Limit Values, as amended (12 021)           Kieselguhr, soda ash flux- calcined - Respirable fraction.         TWA         15 mg/m3         US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended (1989)           Kieselguhr, soda ash flux- calcined - Respirable fraction.         TWA         5 mg/m3         US. Tennessee. OELs. Occupational Exposure Limits, Table Z-1A, as amended (01 2019)           Kieselguhr, soda ash flux- calcined - Total dust.         TWA         15 mg/m3         US. Tennessee. OELs. Occupational Exposure Limits, Table Z-1A, as amended (01 2019)           Kieselguhr, soda ash flux- calcined - Total dust.         TWA         15 mg/m3         US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants, as amended (12 2017)           Kieselguhr, soda ash flux- calcined - Respirable         TWA         15 mg/m3			3 000 mg/m3	US NIOSH Immediately Dangerous to Life or
Kieselguhr, soda ash flux- calcined - Particulate.       AN ESL       2 µg/m3       US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended (06 2018)         Kieselguhr, soda ash flux- calcined - Respirable particles.       TWA       3 mg/m3       US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended (06 2018)         Kieselguhr, soda ash flux- calcined - Respirable particles.       TWA       3 mg/m3       US. ACGIH Threshold Limit Values, as amended (01 2021)         Kieselguhr, soda ash flux- calcined - Inhalable particles.       TWA       10 mg/m3       US. ACGIH Threshold Limit Values, as amended (01 2021)         Kieselguhr, soda ash flux- calcined - Total dust.       TWA       15 mg/m3       US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended (1989)         Kieselguhr, soda ash flux- calcined - Respirable fraction.       TWA       5 mg/m3       US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A, as amended (01 2019)         Kieselguhr, soda ash flux- calcined - Total dust.       TWA       15 mg/m3       US. California Code of Regulations, Title 8, section 5155. Airborne Contaminants, as amended (12 2017)         Kieselguhr, soda ash flux- calcined - Respirable       TWA       15 mg/m3       US. California Code of Regulations, Title 8, section 5155. Airborne Contaminants, as amended (12 2017)         Kieselguhr, soda ash flux- calcined - Total dust.       TWA       15 mg/m3       US. CSI-KA Table Z-3 (29 CFR 1910.1000), as amended (09 2016)     <			3,000 mg/mb	Health (IDI H) Values, as amended (10 2017)
calcined - Particulate. ST ESL ST ETT ESL ST ETT ESL ST EST ST EST ST ESL ST EST EST ST EST S	Kieselguhr. soda ash flux-	ANESL	2 µa/m3	US. Texas. Effects Screening Levels (Texas
amended (06 2018)           ST ESL         27 µg/m3         US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended (06 2018)           Kieselguhr, soda ash flux- calcined - Respirable particles.         TWA         3 mg/m3         US. ACGIH Threshold Limit Values, as amended (01 2021)           Kieselguhr, soda ash flux- calcined - Inhalable particles.         TWA         10 mg/m3         US. ACGIH Threshold Limit Values, as amended (01 2021)           Kieselguhr, soda ash flux- calcined - Inhalable particles.         TWA         15 mg/m3         US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended (1989)           Kieselguhr, soda ash flux- calcined - Respirable fraction.         TWA         5 mg/m3         US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended (1989)           Kieselguhr, soda ash flux- calcined - Total dust.         TWA         5 mg/m3         US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A, as amended (01 2019)           Kieselguhr, soda ash flux- calcined - Total dust.         TWA         15 mg/m3         US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants, as amended (12 2017)           Kieselguhr, soda ash flux- calcined - Respirable         TWA PEL         5 mg/m3         US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants, as amended (12 2017)           Kieselguhr, soda ash flux- calcined - Respirable         TWA PEL         5 mg/m3         US. California Code of Regulations, Title 8, Section 5155. Air	calcined - Particulate.		- p.g	Commission on Environmental Quality), as
Kieselguhr, soda ash flux- calcined - Respirable particles.       TWA       3 mg/m3       US. ACGIH Threshold Limit Values, as amended (00 2018)         Kieselguhr, soda ash flux- calcined - Inhalable particles.       TWA       10 mg/m3       US. ACGIH Threshold Limit Values, as amended (01 2021)         Kieselguhr, soda ash flux- calcined - Total dust.       TWA       15 mg/m3       US. ACGIH Threshold Limit Values, as amended (01 2021)         Kieselguhr, soda ash flux- calcined - Total dust.       TWA       15 mg/m3       US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended (1989)         Kieselguhr, soda ash flux- calcined - Respirable       TWA       5 mg/m3       US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A, as amended (01 2019)         Kieselguhr, soda ash flux- calcined - Total dust.       TWA       15 mg/m3       US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A, as amended (01 2019)         Kieselguhr, soda ash flux- calcined - Total dust.       TWA PEL       10 mg/m3       US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants, as amended (12 2017)         Kieselguhr, soda ash flux- calcined - Total dust.       TWA PEL       5 mg/m3       US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (09 2016)         Kieselguhr, soda ash flux- calcined - Total dust.       TWA       15 mg/m3       US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (09 2016)         Kieselguhr, soda ash flux- calcined - Total dust.       TWA       15 mg/m3				
amended (06 2018)     amended (06 2018)       Calcined - Respirable particles.     TWA     3 mg/m3     US. ACGIH Threshold Limit Values, as amended (01 2021)       Kieselguhr, soda ash flux- calcined - Inhalable particles.     TWA     10 mg/m3     US. ACGIH Threshold Limit Values, as amended (01 2021)       Kieselguhr, soda ash flux- calcined - Total dust.     TWA     15 mg/m3     US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended (1889)       Kieselguhr, soda ash flux- calcined - Respirable     TWA     5 mg/m3     US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A, as amended (01 2019)       Kieselguhr, soda ash flux- calcined - Total dust.     TWA     5 mg/m3     US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A, as amended (01 2019)       Kieselguhr, soda ash flux- calcined - Total dust.     TWA     15 mg/m3     US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A, as amended (01 2019)       Kieselguhr, soda ash flux- calcined - Total dust.     TWA     15 mg/m3     US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants, as amended (12 2017)       Kieselguhr, soda ash flux- calcined - Respirable fraction.     TWA     15 mg/m3     US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants, as amended (12 2017)       Kieselguhr, soda ash flux- calcined - Total dust.     TWA     15 mg/m3     US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (09 2016)       Kieselguhr, soda ash flux- calcined - Total dust.     TWA     15 mg/m3 <td< td=""><td></td><td>ST ESL</td><td>27 µg/m3</td><td>US. Texas. Effects Screening Levels (Texas</td></td<>		ST ESL	27 µg/m3	US. Texas. Effects Screening Levels (Texas
Kieselguhr, soda ash flux- calcined - Respirable particles.       TWA       3 mg/m3       US. ACGIH Threshold Limit Values, as amended (01 2021)         Kieselguhr, soda ash flux- calcined - Inhalable particles.       TWA       10 mg/m3       US. ACGIH Threshold Limit Values, as amended (01 2021)         Kieselguhr, soda ash flux- calcined - Total dust.       TWA       15 mg/m3       US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended (1989)         Kieselguhr, soda ash flux- calcined - Respirable fraction.       TWA       5 mg/m3       US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended (1989)         Kieselguhr, soda ash flux- calcined - Total dust.       TWA       5 mg/m3       US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A, as amended (01 2019)         Kieselguhr, soda ash flux- calcined - Total dust.       TWA       15 mg/m3       US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A, as amended (01 2019)         Kieselguhr, soda ash flux- calcined - Total dust.       TWA       15 mg/m3       US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants, as amended (12 2017)         Kieselguhr, soda ash flux- calcined - Respirable fraction.       TWA       15 mg/m3       US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (09 2016)         Kieselguhr, soda ash flux- calcined - Total dust.       TWA       15 mg/m3       US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (09 2016)         Kieselguhr, soda ash flux- calcined - Total dust.       TWA       15				
calcined - Respirable particles. Kieselguhr, soda ash flux- calcined - Inhalable particles. Kieselguhr, soda ash flux- calcined - Total dust. TWA TWA Calcined - Notal dust. TWA TWA Calcined - Respirable fraction. TWA TWA Calcined - Respirable fraction. TWA TWA TWA TWA TWA TWA TWA TWA TWA TWA				amended (06 2018)
particles.       TWA       10 mg/m3       US. ACGIH Threshold Limit Values, as amended (01 2021)         Kleselguhr, soda ash flux-calcined - Inhalable particles.       TWA       15 mg/m3       US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended (1989)         Kleselguhr, soda ash flux-calcined - Total dust.       TWA       5 mg/m3       US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended (1989)         Kleselguhr, soda ash flux-calcined - Respirable fraction.       TWA       5 mg/m3       US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended (1989)         Kleselguhr, soda ash flux-calcined - Total dust.       TWA       5 mg/m3       US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A, as amended (01 2019)         Kleselguhr, soda ash flux-calcined - Total dust.       TWA       10 mg/m3       US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A, as amended (01 2019)         Kleselguhr, soda ash flux-calcined - Respirable fraction.       TWA PEL       10 mg/m3       US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants, as amended (12 2017)         Kleselguhr, soda ash flux-calcined - Respirable fraction.       TWA       15 mg/m3       US. CSHA Table Z-3 (29 CFR 1910.1000), as amended (09 2016)         Kleselguhr, soda ash flux-calcined - Total dust.       TWA       15 mg/m3       US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (09 2016)         Kleselguhr, soda ash flux-calcined - Total dust.       TWA       15 mg/m3       US. OSHA Table Z-3		TWA	3 mg/m3	
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			amended (09 2016)
(1) QUARTZ - Respirable	REL	0.05 mg/m3	US. NIOSH: Pocket Guide to Chemical
dust.			Hazards, as amended (2010)
(1) QUARTZ - Respirable	TWA	0.05 mg/m3	US. OSHA Specifically Regulated Substances
dust.			(29 CFR 1910.1001-1053), as amended (03
			2016)
	OSHA_AC	0.025 mg/m3	US. OSHA Specifically Regulated Substances
	Т		(29 CFR 1910.1001-1053), as amended (03
			2016)
(1) QUARTZ - Respirable	PEL	0.05 mg/m3	US. OSHA Table Z-1 Limits for Air
dust.			Contaminants (29 CFR 1910.1000), as
			amended (03 2016)
	TWA	0.1 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000),
		-	as amended (1989)
(1) QUARTZ - Particulate.	ANESL	0.27 μg/m3	US. Texas. Effects Screening Levels (Texas
			Commission on Environmental Quality), as
			amended (11 2016)
(1) QUARTZ - Respirable	TWA PEL	0.05 mg/m3	US. California Code of Regulations, Title 8,
dust.			Section 5155. Airborne Contaminants, as
			amended (10 2016)
(1) QUARTZ - Respirable.	TWA	2.4 millions	US. OSHA Table Z-3 (29 CFR 1910.1000), as
		of particles	amended (2000)
		per cubic foot	
		of air	
	TWA	0.1 mg/m3	US. OSHA Table Z-3 (29 CFR 1910.1000), as
			amended (2000)
(1) QUARTZ	IDLH	50 mg/m3	US. NIOSH. Immediately Dangerous to Life or
			Health (IDLH) Values, as amended (10 2017)
(1) QUARTZ - Respirable	TWA	0.050 mg/m3	US. Tennessee. OELs. Occupational Exposure
dust.			Limits, Table Z1A, as amended (01 2019)
(1) QUARTZ - Particulate.	ST ESL	14 µg/m3	US. Texas. Effects Screening Levels (Texas
			Commission on Environmental Quality), as
			amended (06 2018)
(1) QUARTZ - Respirable	TWA	0.025 mg/m3	US. ACGIH Threshold Limit Values, as
fraction.			amended (02 2020)

This product contains one or more substances with an occupational exposure limit. However, the respirable particle(s) of this/these substance(s) are inextricably bound within the polymer matrix. Therefore, we do not expect an exposure to this/these substance(s) during normal use of this product. Tooling or machining of the cured product (sanding, cutting, milling) may release hazardous, respirable substances.

#### Appropriate Engineering Controls

MOMENTIVE

inventing possibilities

Eye wash facilities and emergency shower must be available when handling this product. Ventilation and other forms of engineering controls are preferred for controlling exposures. Respiratory protection may be needed for non-routine or emergency situations.

#### Individual protection measures, such as personal protective equipment

General information:	General (mechanical) room ventilation is expected to be satisfactory if handled at low temperatures or in covered equipment.
Eye/face protection:	Safety glasses with side shields
Skin Protection Hand Protection	: Use chemical-resistant, impervious gloves.
Other:	Wear suitable protective clothing and eye/face protection.



Respiratory Protection:	Use only in well-ventilated areas. If inhalation exposure is expected, 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:	Observe good industrial hygiene practices. Wash hands after handling. When using do not eat, drink or smoke. Provide adequate ventilation.

## 9. Physical and chemical properties

Appearance	
Physical state:	liquid
Form:	liquid
Color:	Red
Odor:	Faint
Odor threshold:	No data available.
pH:	No data available.
Melting point/freezing point:	Not applicable
Initial boiling point and boiling range:	Not applicable
Flash Point:	ca. 109 °C (Closed Cup)
Evaporation rate:	No data available.
Flammability (solid, gas):	No data available.
Upper/lower limit on flammability or explosiv	/e 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:	>7
Density:	ca. 1.48 g/cm3
Relative density:	ca. 1.48
Solubility(ies)	
Solubility in water:	Slightly Soluble
Solubility (other):	No data available.
Partition coefficient (n-octanol/water) Log Pow:	No data available.
Auto-ignition temperature:	No data available.
Decomposition temperature:	No data available.
SADT:	No data available.
Viscosity, dynamic:	No data available.

SDS\_US



Viscosity, kinematic:	No data available.
VOC:	15 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 polymerization does not occur.
Conditions to avoid:	No data available.
Incompatible Materials:	No data available.
Hazardous Decomposition Products:	No data available.

## 11. Toxicological information

Information on likely routes of ex Ingestion:	<b>kposure</b> No data available.	
Inhalation:	No data available.	
Skin Contact:	No data available.	
Eye contact:	No data available.	
Symptoms related to the physica Ingestion:	I, chemical and toxicological characteristics No data available.	
Inhalation:	No data available.	
Skin Contact:	No data available.	
Eye contact:	No data available.	
Information on toxicological effe	cts	
Acute toxicity (list all possible routes of exposure)		
Oral Product:	ATEmix: 33,300.03 mg/kg	
<b>Specified substance(s):</b> (1) Cristobalite	LD 50 (Rat): 5,000 mg/kg	

Version: 2.3 Revision Date: 11/09/2021

#### RTV60

MOMENTIVE

inventing possibilities

Product:	Not classified for acute toxicity based on available data.		
Inhalation Product:	Not classified for acute toxicity based on available data.		
Repeated dose toxicity Product:	No data available.		
Skin Corrosion/Irritation Product:	No data available.		
Serious Eye Damage/Eye Irritati Product:	on No data available.		
Respiratory or Skin Sensitizatio Product:	n 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			
US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050), as amended: 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 - Product:	Single Exposure No data available.		
Specific Target Organ Toxicity -	Repeated Exposure		
SDS_US			



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:	No data available.	
Aquatic Invertebrates Product:	No data available.	
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.	
BOD/COD Ratio Product:	No data available.	
Bioaccumulative potential Bioconcentration Factor (BCF) Product: No data available.		
Partition Coefficient n-octar Product:	No data available.	
SDS_US		



Mobility in soil:	No data available.
Known or predicted distribu	tion to environmental compartments
Red iron oxide	No data available.
(1) Cristobalite	No data available.
Kieselguhr, soda ash flux- calcined	No data available.
Silicic acid, ethyl ester	No data available.
(1) QUARTZ	No data available.
Other adverse effects:	No data available.
13. Disposal considerations	
Disposal instructions:	No data available.
Disposar manuellons.	ויט עמנמ מימוומטוב.
Contaminated Packaging:	Dispose of as unused product.
14. Transport information	

#### DOT

Not regulated.

#### IMDG

Not regulated.

#### ΙΑΤΑ

Not regulated.

Special precautions for user:	This product is not regarded as dangerous goods according to the national and international regulations on the transport of	
	dangerous goods.	

### 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.

# US. Toxic Substances Control Act (TSCA) Section 5(a)(2) Final Significant New Use Rules (SNURs) (40 CFR 721, Subpt E)

None present or none present in regulated quantities.



#### US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050), as amended

<u>Chemical Identity</u> Siloxanes and Silicones, di-Me hydroxy terminated	<u>OSHA hazard(s)</u> No OSHA Hazards
Red iron oxide	Causes mild skin irritation.; Respiratory hazard.
(1) Cristobalite	Toxic by inhalation.; Systemic effects
Kieselguhr, soda ash flux- calcined	Toxic by inhalation.; Systemic effects

#### 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

Not classified

#### SARA 302 Extremely Hazardous Substance

None present or none present in regulated quantities.

#### 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>

US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 313 Toxic Chemicals (40 CFR 372.65) - Supplier Notification Required 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



**WARNING:** This product can expose you to chemicals including (1) Cristobalite, which is [are] known to the State of California to cause cancer.

This product can expose you to chemicals including calcium oxide, which is [are] known to the State of California to cause birth defects or other reproductive harm.

For more information go to www.P65Warnings.ca.gov.



## US. New Jersey Worker and Community Right-to-Know Act <u>Chemical Identity</u>

Siloxanes and Silicones, di-Me hydroxy terminated Red iron oxide (1) Cristobalite Kieselguhr, soda ash flux-calcined Silicic acid, ethyl ester (1) QUARTZ

#### US. Massachusetts RTK - Substance List

#### Chemical Identity

Red iron oxide (1) Cristobalite (1) QUARTZ

#### US. Pennsylvania RTK - Hazardous Substances

#### Chemical Identity

Red iron oxide (1) Cristobalite Kieselguhr, soda ash flux-calcined Silicic acid, ethyl ester

#### US. Rhode Island RTK

Chemical Identity Red iron oxide MOMENTIVE "
inventing possibilities

RTV60

#### **Inventory Status:**

Not in compliance with the	Remarks: None.
inventory.	
On or in compliance with the	Remarks: None.
inventory	
Not in compliance with the	Remarks: None.
inventory.	
On or in compliance with the	Remarks: None.
inventory	
On or in compliance with the	Remarks: None.
inventory	
On or in compliance with the	Remarks: None.
inventory	
On or in compliance with the	Remarks: None.
inventory	
On or in compliance with the	Remarks: None.
inventory	
On or in compliance with the	Remarks: None.
inventory	
On or in compliance with the	Remarks: None.
inventory	
On or in compliance with the	Remarks: None.
inventory .	
	<ul> <li>inventory.</li> <li>On or in compliance with the inventory</li> <li>Not in compliance with the inventory.</li> <li>On or in compliance with the inventory</li> </ul>

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

#### **HMIS Hazard ID**

Health	0
Flammability	1
Physical Hazards	0
PERSONAL PROTECTION	

Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe; RNP - Rating not possible; \*Chronic health effect

Issue Date:	11/09/2021
Revision Date:	No data available.
Version #:	2.3
Further Information:	No data available.



# **SAFETY DATA SHEET**

1. Identification			
Product identifier: DBT			
Other means of identification Synonyms:		Catalyst (DBT)	
Recommended use and restriction on use Recommended use: For industrial use only. Restrictions on use: Not known.			
Manufacturer/Importer/Distr ibutor 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**

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 <sup>1.</sup>
Specific Target Organ Toxicity - Repeated Exposure	Category 1 <sup>2.</sup>

# Target Organs 1. thymus

- 2. thymus

#### Label Elements

SDS\_US



Hazard Symbol:	
Signal Word:	Danger
Hazard Statement:	<ul> <li>H314; Causes severe skin burns and eye damage.</li> <li>H317; May cause an allergic skin reaction.</li> <li>H341; Suspected of causing genetic defects.</li> <li>H360; May damage fertility or the unborn child.</li> <li>H370; Causes damage to organs.</li> <li>H372; Causes damage to organs <or affected,="" all="" if="" known="" organs="" state=""> through prolonged or repeated exposure <state cause="" conclusively="" exposure="" hazard="" if="" is="" it="" no="" of="" other="" proven="" route="" routes="" that="" the="">.</state></or></li> </ul>
Precautionary Statements	
Prevention:	Do not breathe dust or mists. Wash thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection. Contaminated work clothing should not be allowed out of the workplace. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. Do not eat, drink or smoke when using this product.
Response:	IF INHALED: Remove person to fresh air and keep comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower]. If skin irritation or rash occurs: Get medical advice/attention. IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER/doctor. Specific treatment (see on this label). Wash contaminated clothing before reuse.
Storage:	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.
Other hazards which do not result in GHS classification:	None.

## 3. Composition/information on ingredients



#### Substances

Chemical Identity	CAS number	Content in percent (%)*	
Dibutyltin Dilaurate	77-58-7	50 - <100%	
* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.			

1. First-aid measures		
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/eff	fects, 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 finding 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 med	ical 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.	
	2/	



#### Suitable (and unsuitable) extinguishing 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 an	d 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 measure	S		
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.

## 8. Exposure controls/personal protection

### **Control Parameters**

**Occupational Exposure Limits** 

Chemical Identity Type Exposure Limit Values Source	
---	--



Dibutyltin Dilaurate - as Sn	STEL	0.2 mg/m3	US. ACGIH Threshold Limit Values (03 2015)
	TWA	0.1 mg/m3	US. ACGIH Threshold Limit Values (03 2015)
	REL	0.1 mg/m3	US. NIOSH: Pocket Guide to Chemical
		011 11.9, 11.0	Hazards (2010)
	PEL	0.1 mg/m3	US. OSHA Table Z-1 Limits for Air
		5	Contaminants (29 CFR 1910.1000) (02 2006)
	TWA	0.1 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000)
		Ũ	(1989)
	TWA	0.1 mg/m3	US. Tennessee. OELs. Occupational Exposure
			Limits, Table Z1A (06 2008)
	TWA PEL	0.1 mg/m3	US. California Code of Regulations, Title 8,
		-	Section 5155. Airborne Contaminants (01
			2015)
	STEL	0.2 mg/m3	US. California Code of Regulations, Title 8,
			Section 5155. Airborne Contaminants (01
			2015)
Dibutyltin Dilaurate -	ANESL	0.1 µg/m3	US. Texas. Effects Screening Levels (Texas
Particulate.			Commission on Environmental Quality) (11
			2016)
	ST ESL	1 µg/m3	US. Texas. Effects Screening Levels (Texas
			Commission on Environmental Quality) (11
			2016)

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 non-routine or emergency situations.
Eye/face protection:	Wear approved safety goggles. Face shield
Skin Protection Hand Protection:	Chemical resistant gloves
Other:	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 prop	erties

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DBT

## 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 explose	sive 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.
Heat of combustion:	No data available.
Vapor pressure:	Negligible
Vapor pressure:	Negligible
Vapor pressure: Vapor density:	Negligible No data available.
Vapor pressure: Vapor density: Density:	Negligible No data available. ca. 1.066 g/cm3 (25 °C)
Vapor pressure: Vapor density: Density: Relative density:	Negligible No data available. ca. 1.066 g/cm3 (25 °C)
Vapor pressure: Vapor density: Density: Relative density: Solubility(ies)	Negligible No data available. ca. 1.066 g/cm3 (25 °C) 1.28
Vapor pressure: Vapor density: Density: Relative density: Solubility(ies) Solubility in water:	Negligible No data available. ca. 1.066 g/cm3 (25 °C) 1.28 Slightly Soluble
Vapor pressure: Vapor density: Density: Relative density: Solubility(ies) Solubility in water: Solubility (other): Partition coefficient (n-octanol/water) Log	Negligible No data available. ca. 1.066 g/cm3 (25 °C) 1.28 Slightly Soluble No data available.
Vapor pressure: Vapor density: Density: Relative density: Solubility(ies) Solubility in water: Solubility (other): Partition coefficient (n-octanol/water) Log Pow:	Negligible No data available. ca. 1.066 g/cm3 (25 °C) 1.28 Slightly Soluble No data available. 4.44 ; pH 6.1 (OECD Test Guideline 107 )
Vapor pressure: Vapor density: Density: Relative density: Solubility(ies) Solubility in water: Solubility (other): Partition coefficient (n-octanol/water) Log Pow: Auto-ignition temperature:	Negligible No data available. ca. 1.066 g/cm3 (25 °C) 1.28 Slightly Soluble No data available. 4.44 ; pH 6.1 (OECD Test Guideline 107 ) > 300 °C
Vapor pressure: Vapor density: Density: Relative density: Solubility(ies) Solubility in water: Solubility (other): Partition coefficient (n-octanol/water) Log Pow: Auto-ignition temperature: Decomposition temperature:	Negligible No data available. ca. 1.066 g/cm3 (25 °C) 1.28 Slightly Soluble No data available. 4.44 ; pH 6.1 (OECD Test Guideline 107 ) > 300 °C No data available.
Vapor pressure: Vapor density: Density: Relative density: Solubility(ies) Solubility in water: Solubility (other): Partition coefficient (n-octanol/water) Log Pow: Auto-ignition temperature: Decomposition temperature: SADT:	Negligible No data available. ca. 1.066 g/cm3 (25 °C) 1.28 Slightly Soluble No data available. 4.44 ; pH 6.1 (OECD Test Guideline 107 ) > 300 °C No data available. No data available.
Vapor pressure: Vapor density: Density: Relative density: Solubility(ies) Solubility in water: Solubility (other): Partition coefficient (n-octanol/water) Log Pow: Auto-ignition temperature: Decomposition temperature: SADT: Viscosity, dynamic:	Negligible No data available. ca. 1.066 g/cm3 (25 °C) 1.28 Slightly Soluble No data available. 4.44 ; pH 6.1 (OECD Test Guideline 107 ) > 300 °C No data available. No data available. No data available.

# 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.	
SDS_US		6/14

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DBT

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 ex	xposure		
Ingestion:	No data available.		
Inhalation:	No data available.		
Skin Contact:	No data available.		
Eye contact:	No data available.		
Symptoms related to the physica Ingestion:	I, chemical and toxicological characteristics No data available.		
Inhalation:	No data available.		
Skin Contact:	No data available.		
Eye contact:	No data available.		
Information on toxicological effe	cts		
Acute toxicity (list all possible	routes of exposure)		
Oral Product:	Not classified for acute toxicity based on available data.		
Specified substance(s):			

Dermal Product:	Not classified for acute toxicity based on available data.
<b>Specified substance(s):</b> Dibutyltin Dilaurate	LD 50 (Rat, ): > 2,000 mg/kg
Inhalation Product:	Not classified for acute toxicity based on available data.
Specified substance(s): Dibutyltin Dilaurate	LC50 (Rat, ): 10 mg/l

LD 50 (Rat, male and female): 2,071 mg/kg

Dibutyltin Dilaurate



Repeated dose toxicity Product:	No data available.	
Skin Corrosion/Irritation Product:	OECD-Guideline 404 (Acute Dermal Irritation/Corrosion) (Rabbit): Cor	rosive
Serious Eye Damage/Eye Irritat Product:	ion (Rabbit): Irritating to eyes.	
Respiratory or Skin Sensitization Product:	n No data available.	
Carcinogenicity Product:	No data available.	
IARC Monographs on the No carcinogenic component	Evaluation of Carcinogenic Risks to Humans: s identified	
US. National Toxicology F No carcinogenic component	Program (NTP) Report on Carcinogens: s identified	
US. OSHA Specifically Re No carcinogenic component	gulated Substances (29 CFR 1910.1001-1050): s 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 Product:	- Single Exposure No data available.	
Specific Target Organ Toxicity Product:	- Repeated Exposure No data available.	
Target Organs Specific Target Organ Toxicity Specific Target Organ Toxicity	<ul> <li>/ - Single Exposure: thymus</li> <li>/ - Repeated Exposure: thymus</li> </ul>	
Aspiration Hazard Product:	No data available.	
SDS_US		8/14



Other effects:	Contains dibutyl tin dilaurate which may cause birth defects and reproductive effects based on animal data. In animal studies with repea oral application of dibutyl tin compounds toxic effects were observed on 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): DibutyItin Dilaurate	EC50 (Daphnia magna, 48 h): < 0.463 mg/l Fresh water	
Chronic hazards to the aquati	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.	
<b>Specified substance(s):</b> DibutyItin Dilaurate	23 % (39 d) The product is not readily biodegradable.	
BOD/COD Ratio Product:	No data available.	
Bioaccumulative potential Bioconcentration Factor (B0 Product:	CF) No data available.	
SDS_US		9/14



Partition Coefficient n-octa Product:	nol / water (log Kow) Log Kow: 4.44 20.8 °C (OECD Test Guideline 107)	
Mobility in soil:	No data available.	
Known or predicted distribution Dibutyltin Dilaurate	ution to environmental compartments 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.	
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.(DibutyItin Dilaurate) 8 8 III	
Marine Pollutant:	Yes	
IMDG UN Number: UN Proper Shipping Name: Transport Hazard Class(es) Class: Label(s): EmS No.: Packing Group:	UN 1760 CORROSIVE LIQUID, N.O.S.(DibutyItin Dilaurate) 8 8 F-A, S-B III	
Marine Pollutant: Limited quantity	Yes 5.00L	
Excepted quantity	E1	
ΙΑΤΑ		

SDS\_US



Transport Hazard Class(es): Class: 8 Label(s): 8 Packing Group: Ш Cargo aircraft only Packing 856 Instructions: Passenger and cargo aircraft 856 Packing Instructions: Limited quantity: 1.00L Packing Instructions: Y841 Excepted quantity E1 Environmental Hazards: Environmentally hazardous Marine Pollutant: Yes 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 accordance with the IMDG code. This product is considered hazardous for transportation. Momentive Performance Materials ships this material under Limited Quantity or Consumer Commodity provisions of the transport regulations.

DBT

#### 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

Specific target organ toxicity (single or repeated exposure) Skin Corrosion or Irritation Serious eye damage or eye irritation Respiratory or Skin Sensitization Germ Cell Mutagenicity Reproductive toxicity

#### SARA 302 Extremely Hazardous Substance

None present or none present in regulated quantities.



## SARA 304 Emergency Release Notification None present or none present in regulated quantities.

## SARA 311/312 Hazardous Chemical

Chemical IdentityThreshold Planning QuantityDibutyltin Dilaurate10000 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

No ingredient regulated by CA Prop 65 present.

#### US. New Jersey Worker and Community Right-to-Know Act

#### Chemical Identity Dibutyltin Dilaurate

#### 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

## Chemical Identity

Dibutyltin Dilaurate



#### **Inventory Status:**

Australia AICS:	On or in compliance with the	Remarks: None.
Australia Alos.	inventory	Remarks. None.
Canada DSL Inventory List:	On or in compliance with the inventory	Remarks: None.
EINECS, ELINCS or NLP:	On or in compliance with the inventory	Remarks: None.
Japan (ENCS) List:	On or in compliance with the inventory	Remarks: None.
China Inv. Existing Chemical Substances:	On or in compliance with the inventory	Remarks: None.
Korea Existing Chemicals Inv. (KECI):	On or in compliance with the inventory	Remarks: None.
Canada NDSL Inventory:	Not in compliance with the inventory.	Remarks: None.
Philippines PICCS:	On or in compliance with the inventory	Remarks: None.
US TSCA Inventory:	On or in compliance with the inventory	Remarks: None.
New Zealand Inventory of Chemicals:	On or in compliance with the inventory	Remarks: None.
Taiwan Chemical Substance Inventory:	On or in compliance with the inventory	Remarks: None.
REACH:	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.

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

#### **HMIS Hazard ID**

Health	*	4
Flammability		1
Physical Hazards		0
PERSONAL PROTECTION		

Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe; RNP - Rating not possible; \*Chronic health effect



Issue Date:	07/27/2018
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Version #:	2.1
Further Information:	No data available.
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.
	<b>Further Information</b> 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 warrantyor quality specification. The information relates only to the specific material designated and may not be valid for such material used

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