

TSE3660 (A)

SAFETY DATA SHEET

1. Identification

Product identifier: TSE3660 (A)

Other means of identification

Synonyms: Silicone compound

Recommended use and restriction on use

Recommended use: Silicone Potting compound

Restrictions on use: Not known.

Manufacturer/Importer/Distributor Information : Momentive Performance Materials - Japan LLC
133 Nishishin-machi, Ohta-shi
Ohta-shi 10 3738505

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

Not classified

Label Elements

Hazard Symbol: No symbol

Signal Word: No signal word.

Hazard Statement: Not applicable

Precautionary Statements Not applicable

Other hazards which do not result in GHS classification: None.

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3. Composition/information on ingredients

Mixtures

Chemical Identity	CAS number	Content in percent (%)*	Notes
(1) Calcium Carbonate	471-34-1	20 - <50%	# This substance has workplace exposure limit(s).
Aluminium hydroxide	21645-51-2	10 - <20%	# This substance has workplace exposure limit(s).
(1) Silica	7631-86-9	1 - <5%	# 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.

4. First-aid measures

Ingestion:	If swallowed, do NOT induce vomiting. Give a glass of water. Seek medical advice. Never give liquid to an unconscious person.
Inhalation:	Move to fresh air. Get medical attention if symptoms persist.
Skin Contact:	Wash area with soap and water. Get medical attention if symptoms occur.
Eye contact:	In the event of contact with the eyes, rinse thoroughly with clean water. Get medical attention if any discomfort continues.

Most important symptoms/effects, acute and delayed

Symptoms:	None known.
Hazards:	No data available.

Indication of immediate medical attention and special treatment needed

Treatment:	Treatment is symptomatic and supportive.
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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.
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Suitable (and unsuitable) extinguishing media

Suitable extinguishing media: All standard extinguishing agents are suitable.

Unsuitable extinguishing media: Avoid water in straight hose stream; will scatter and spread 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 and precautions for firefighters

Special fire fighting procedures: Keep away from sources of ignition - No smoking. All equipment used when handling the product must be grounded.

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 measures

Personal precautions, protective equipment and emergency procedures: Caution: Contaminated surfaces may be slippery. Keep unprotected persons away. Avoid contact with skin and eyes. Use 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.

Notification Procedures: Remove sources of ignition. Pay attention to the risk of combustion by fire or other sources of ignition.

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 get in eyes, on skin, on clothing. Do not taste or swallow. See Section 8 of the SDS for Personal Protective Equipment.

Conditions for safe storage, including any incompatibilities: Keep in a cool, ventilated location far from heat source and flame. Keep container closed. Use original container or packaging of similar material of construction.

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8. Exposure controls/personal protection

Control Parameters

Occupational Exposure Limits

Chemical Identity	Type	Exposure Limit Values	Source
(1) Calcium Carbonate - Total	REL	10 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards, as amended (2010)
(1) Calcium Carbonate - Respirable.	REL	5 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards, as amended (2010)
(1) Calcium Carbonate - Total dust.	PEL	15 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended (02 2006)
(1) Calcium Carbonate - Respirable fraction.	PEL	5 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended (02 2006)
(1) Calcium Carbonate - Total dust.	TWA	15 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended (1989)
(1) Calcium Carbonate - Respirable fraction.	TWA	5 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended (1989)
(1) Calcium Carbonate - Total dust.	TWA	15 mg/m3	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A, as amended (06 2008)
(1) Calcium Carbonate - Respirable fraction.	TWA	5 mg/m3	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A, as amended (06 2008)
Aluminium hydroxide - Respirable fraction.	TWA	1 mg/m3	US. ACGIH Threshold Limit Values, as amended (03 2015)
Aluminium hydroxide - Total dust.	TWA	15 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended (1989)
Aluminium hydroxide - Respirable fraction.	TWA	5 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended (1989)
	TWA	5 mg/m3	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A, as amended (06 2008)
Aluminium hydroxide - Total dust.	TWA	15 mg/m3	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A, as amended (06 2008)
Aluminium hydroxide - Respirable fraction.	TWA PEL	5 mg/m3	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants, as amended (01 2015)
Aluminium hydroxide - Total dust.	TWA PEL	10 mg/m3	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants, as amended (01 2015)
Aluminium hydroxide - Respirable fraction.	TWA	5 mg/m3	US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (03 2016)
Aluminium hydroxide - Total dust.	TWA	15 mg/m3	US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (03 2016)
	TWA	50 millions of particles per cubic foot of air	US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (03 2016)
Aluminium hydroxide - Respirable fraction.	TWA	15 millions of particles per cubic foot of air	US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (03 2016)
Aluminium hydroxide - Particulate.	ST ESL	50 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended (06 2018)
	AN ESL	5 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended (06 2018)
(1) Silica	REL	6 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards, as amended (2010)
	TWA	20 millions of particles per cubic foot of	US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (2000)

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		air	
	TWA	0.8 mg/m ³	US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (2000)
	IDLH	3,000 mg/m ³	US. NIOSH. Immediately Dangerous to Life or Health (IDLH) Values, as amended (10 2017)
(1) Silica - Particulate.	AN ESL	2 µg/m ³	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended (06 2018)
	ST ESL	27 µg/m ³	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended (06 2018)

Appropriate Engineering Controls

Provide eyewash station and safety shower. Local exhaust is recommended. Observe good industrial hygiene practices.

Individual protection measures, such as personal protective equipment

General information: No data available.

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: 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: Avoid contact with eyes, skin, and clothing. Wash hands after handling. When using do not eat, drink or smoke.

9. Physical and chemical properties

Appearance

Physical state: liquid

Form: liquid

Color: White

Odor: Faint

Odor threshold: No data available.

pH: No data available.

Melting point/freezing point: No data available.

Initial boiling point and boiling range: No data available.

Flash Point: 300 °C

Evaporation rate: No data available.

Flammability (solid, gas): No data available.

Upper/lower limit on flammability or explosive limits

Flammability limit - upper (%): No data available.

Flammability limit - lower (%): No data available.

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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:	No data available.
Density:	1.27 g/cm ³ (23 °C)
Relative density:	No data available.
Solubility(ies)	
Solubility in water:	No data available.
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:	3,500 mPa·s (23 °C)
Viscosity, kinematic:	No data available.
VOC:	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 polymerization does not occur.
Conditions to avoid:	None known.
Incompatible Materials:	Strong Acids, Strong Bases
Hazardous Decomposition Products:	In case of fire, gives off (emits): Carbon dioxide Silicon dioxide. Measurements at temperatures above 150°C in presence of air (oxygen) have shown that small amounts of formaldehyde are formed due to oxidative degradation.

11. Toxicological information

Information on likely routes of exposure

Ingestion:	No data available.
Inhalation:	No data available.
Skin Contact:	No data available.

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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: Not classified for acute toxicity based on available data.

Specified substance(s):

(1) Silica LD 50 (Rat): > 15,000 mg/kg

Dermal

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.

Specified substance(s):

(1) Silica (Rabbit): No skin irritation

Serious Eye Damage/Eye Irritation

Product: No data available.

Respiratory or Skin Sensitization

Product: No data available.

Carcinogenicity

Product: No data available.

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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 - Single Exposure

Product: No data available.

Specific Target Organ Toxicity - Repeated Exposure

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.

Specified substance(s):

(1) Silica

LC0 (Brachydanio rerio, 96 h): 5,000 mg/l

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Aquatic Invertebrates

Product: No data available.

Chronic hazards to the aquatic environment:

Fish

Product: No data available.

Specified substance(s):

(1) Silica LC0 (Brachydanio rerio, 4 d): 5,000 mg/l

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-octanol / water (log Kow)

Product: No data available.

Mobility in soil: No data available.

Known or predicted distribution to environmental compartments

(1) Calcium Carbonate No data available.

Aluminium hydroxide No data available.

(1) Silica No data available.

Other adverse effects: No data available.

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13. Disposal considerations

General information:	The generation of waste should be avoided or minimized wherever possible. See Section 8 for information on appropriate personal protective equipment. 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
Not regulated.

IMDG
Not regulated.

IATA
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.

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.

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SARA 311/312 Hazardous Chemical

<u>Chemical Identity</u>	<u>Threshold Planning Quantity</u>
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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 requiring a warning under CA Prop 65.

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

Chemical Identity

Siloxanes and Silicones, di-Me hydroxy terminated

(1) Calcium Carbonate

Aluminium hydroxide

Polydimethylsiloxane

(1) Silica

US. Massachusetts RTK - Substance List

Chemical Identity

(1) Calcium Carbonate

US. Pennsylvania RTK - Hazardous Substances

Chemical Identity

(1) Calcium Carbonate

US. Rhode Island RTK

Chemical Identity

(1) Calcium Carbonate

Aluminium hydroxide

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Inventory Status:

Australia AICS:	y (positive listing)	Remarks: None.
Canada DSL Inventory List:	y (positive listing)	Remarks: None.
EU EINECS List:	y (positive listing)	Remarks: None.
Japan (ENCS) List:	y (positive listing)	Remarks: None.
China Inventory of Existing Chemical Substances:	y (positive listing)	Remarks: None.
Korea Existing Chemicals Inv. (KECI):	y (positive listing)	Remarks: None.
Canada NDSL Inventory:	n (Negative listing)	Remarks: None.
Philippines PICCS:	y (positive listing)	Remarks: None.
US TSCA Inventory:	y (positive listing)	Remarks: None.
Taiwan. Taiwan inventory (CSNN):	y (positive listing)	Remarks: None.

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

HMIS Hazard ID

Health	<input type="text" value="0"/>
Flammability	<input type="text" value="1"/>
Physical Hazards	<input type="text" value="0"/>
PERSONAL PROTECTION	

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

Issue Date: 06/18/2020

Revision Date: No data available.

Version #: 2.0

Further Information: No data available.

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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.

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 safehandling, 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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TSE3660(B)

SAFETY DATA SHEET

1. Identification

Product identifier: TSE3660(B)

Other means of identification

Synonyms: Silicone catalyst mixture

Recommended use and restriction on use

Recommended use: Silicone Potting compound

Restrictions on use: Not known.

Manufacturer/Importer/Distributor Information : Momentive Performance Materials - Japan LLC
133 Nishishin-machi, Ohta-shi
Ohta-shi 10 3738505

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

Physical Hazards

Flammable liquids Category 3

Health Hazards

Acute toxicity (Oral) Category 4
Skin Corrosion/Irritation Category 1B
Serious Eye Damage/Eye Irritation Category 1
Skin sensitizer Category 1
Specific Target Organ Toxicity - Category 2¹
Repeated Exposure

Target Organs

1. Respiratory Tract

Unknown toxicity - Health

Acute toxicity, oral	0 %
Acute toxicity, dermal	0 %

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Acute toxicity, inhalation, vapor	0 %
Acute toxicity, inhalation, dust or mist	0 %

Label Elements

Hazard Symbol:



Signal Word: Danger

Hazard Statement: H226; Flammable liquid and vapor.
H302; Harmful if swallowed.
H314; Causes severe skin burns and eye damage.
H317; May cause an allergic skin reaction.
H373; May cause damage to organs through prolonged or repeated exposure.

Precautionary Statements

Prevention: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep container tightly closed. Ground and bond container and receiving equipment. Use explosion-proof electrical, ventilating and lighting equipment. Use non-sparking tools. Take action to prevent static discharges. Do not breathe dust/fume/gas/mist/vapors/spray. Wash face, hands and any exposed skin thoroughly after handling. Do not eat, drink or smoke when using this product. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves/protective clothing/eye protection/face protection.

Response: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Call a POISON CENTER or doctor/ physician if you feel unwell. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower]. Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get medical advice/attention. Specific treatment (see supplemental first aid instructions on this label). IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical advice/attention if you feel unwell. In case of fire: Use alcohol resistant foam for extinction.

Storage: Store in a well-ventilated place. Keep cool. Store locked up.

Disposal: Dispose of contents/ container to an approved facility in accordance with local, regional, national and international regulations.

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Hazard(s) not otherwise classified (HNOC):

Static accumulating flammable liquid can become electrostatically charged even in bonded and grounded equipment. Sparks may ignite liquid and vapor. May cause flash fire or explosion.

3. Composition/information on ingredients

Mixtures

Chemical Identity	CAS number	Content in percent (%)*	Notes
gamma-Aminopropyltriethoxysilane	919-30-2	10 - <20%	No data available.
Silicic acid, ethyl ester	11099-06-2	10 - <20%	No data available.
Aminoethyl aminopropyl trimethoxy silane	1760-24-3	10 - <20%	No data available.
Tris(3(trimethoxysilyl)propyl)isocyanurate	26115-70-8	5 - <10%	No data available.
Dimethyltin neodecanoate	68928-76-7	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.

4. First-aid measures

Ingestion:	Rinse mouth with water. Do not induce vomiting. Seek medical attention. Never give liquid to an unconscious person.
Inhalation:	Move into fresh air and keep at rest. If breathing has stopped, trained personnel should begin artificial respiration immediately and if the heart has stopped, trained personnel should begin cardiopulmonary resuscitation immediately. Get medical attention.
Skin Contact:	Flush contaminated area with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 15 minutes. Get medical attention. Wash contaminated clothing before reuse.
Eye contact:	Immediately flush with plenty of water for up to 15 minutes. Remove any contact lenses and open eyes wide apart. Continue to rinse for at least 15 minutes. Get medical attention if symptoms occur.
Most important symptoms/effects, acute and delayed	
Symptoms:	No data available.
Hazards:	This product is not expected to produce adverse effects under normal conditions of use and appropriate personal hygiene.

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Indication of immediate medical attention and special treatment needed

Treatment: Treatment is symptomatic and supportive.

5. Fire-fighting measures

General Fire Hazards: Do not use water jet as an extinguisher, as this will spread the fire. Use water spray to keep fire-exposed containers cool.

Suitable (and unsuitable) extinguishing media

Suitable extinguishing media: Alcohol resistant foam. Carbon dioxide Dry chemical.

Unsuitable extinguishing media: Avoid water in straight hose stream; will scatter and spread fire.

Specific hazards arising from the chemical: Vapors are flammable and heavier than air. Vapors may travel across the ground and reach remote ignition sources causing a flashback fire danger. Ground container and transfer equipment to eliminate static electric sparks.

Special protective equipment and precautions for fire-fighters

Special fire-fighting procedures: Keep away from sources of ignition - No smoking. Take precautionary measures against static discharges. Product may charge electrostatically during pouring or filling. All equipment used when handling the product must be grounded.

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 measures

Personal precautions, protective equipment and emergency procedures: Avoid contact with eyes, skin, and clothing. Keep out of reach of children. Attention: Not for injection into humans.

Methods and material for containment and cleaning up: Warn other workers of spill. Wear proper protective equipment as specified in the protective equipment section. Wipe, scrape, or soak up in an inert material and put in a container intended for flammable materials for disposal.

Notification Procedures: ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).

Environmental Precautions: Avoid discharge into drains, water courses or onto the ground.

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7. Handling and storage

Precautions for safe handling: Sensitivity to static discharge is expected; material has a flash point below 200 F. Do not breathe vapor/spray. Do not taste or swallow. Avoid contact with eyes, skin, and clothing. See Section 8 of the SDS for Personal Protective Equipment. Wash hands after handling. Material can accumulate static charges which may cause an electrical spark (ignition source). Use proper bonding and/or grounding procedures.

Conditions for safe storage, including any incompatibilities: Keep away from heat, sparks and open flame. Keep container closed. Store in original container.

8. Exposure controls/personal protection

Control Parameters

Occupational Exposure Limits

Chemical Identity	Type	Exposure Limit Values	Source
Dimethyltin neodecanoate - as Sn	STEL	0.2 mg/m ³	US. ACGIH Threshold Limit Values, as amended (03 2015)
	TWA	0.1 mg/m ³	US. ACGIH Threshold Limit Values, as amended (03 2015)
	REL	0.1 mg/m ³	US. NIOSH: Pocket Guide to Chemical Hazards, as amended (2010)
	PEL	0.1 mg/m ³	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended (02 2006)
	TWA	0.1 mg/m ³	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended (1989)
	TWA	0.1 mg/m ³	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A, as amended (06 2008)
	TWA PEL	0.1 mg/m ³	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants, as amended (01 2015)
	STEL	0.2 mg/m ³	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants, as amended (01 2015)
Dimethyltin neodecanoate	IDLH	25 mg/m ³	US. NIOSH. Immediately Dangerous to Life or Health (IDLH) Values, as amended (10 2017)
Dimethyltin neodecanoate - Particulate.	AN ESL	0.1 µg/m ³	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended (06 2018)
	ST ESL	1 µg/m ³	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended (06 2018)

Appropriate Engineering Controls Provide eyewash station and safety shower. General (mechanical) room ventilation is expected to be satisfactory if handled at low temperatures or in covered equipment.

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

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Skin Protection

Hand Protection: Use chemical-resistant, impervious gloves.

Other: Wear suitable protective clothing and eye/face protection.

Respiratory Protection: 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: Good personal hygiene is necessary. Wash hands and contaminated areas with water and soap before leaving the work site. Avoid contact with eyes, skin, and clothing. Do not eat, drink or smoke when using the product.

9. Physical and chemical properties

Appearance

Physical state: liquid
Form: liquid
Color: Blue-green

Odor: Faint

Odor threshold: No data available.

pH: No data available.

Melting point/freezing point: No data available.

Initial boiling point and boiling range: No data available.

Flash Point: 56 °C

Evaporation rate: No data available.

Flammability (solid, gas): No data available.

Upper/lower limit on flammability or explosive 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: No data available.

Density: 1.02 g/cm³ (23 °C)

Relative density: No data available.

Solubility(ies)

Solubility in water: No data available.

Solubility (other): No data available.

Partition coefficient (n-octanol/water) Log Pow: No data available.

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Auto-ignition temperature:	No data available.
Decomposition temperature:	No decomposition if stored and applied as directed.
SADT:	No data available.
Viscosity, dynamic:	No data available.
Viscosity, kinematic:	No data available.
VOC:	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 polymerization does not occur.
Conditions to avoid:	Keep away from sources of ignition - No smoking. Avoid contact with acids and oxidizing substances.
Incompatible Materials:	Oxidizing agents.
Hazardous Decomposition Products:	At temperatures above 150°C (302°F) in the presence of air, product may form formaldehyde. Formaldehyde is a potential cancer hazard, a known skin and respiratory sensitizer, and can irritate eyes, nose, and throat.

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.

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Information on toxicological effects

Acute toxicity (list all possible routes of exposure)

Oral

Product:	ATEmix: 1,505.58 mg/kg
Specified substance(s): Aminoethyl aminopropyl trimethoxy silane	LD 50 (Rat): 2,995 mg/kg
Tris(3(trimethoxysilyl)pro pyl)isocyanurate	LD 50 (Rat, female): 1,713 mg/kg
Dimethyltin neodecanoate	LD 50 (Rat): 890 mg/kg

Dermal

Product:	ATEmix : 15,686.27 mg/kg
Specified substance(s): Aminoethyl aminopropyl trimethoxy silane	LD 50 (Rabbit): > 2,000 mg/kg
Tris(3(trimethoxysilyl)pro pyl)isocyanurate	LD 50 (Rabbit,): > 19,200 mg/kg
Dimethyltin neodecanoate	LD 50 (Rat): > 2,000 mg/kg

Inhalation

Product:	ATEmix: 11.76 mg/l
Specified substance(s): Tris(3(trimethoxysilyl)pro pyl)isocyanurate	: No clinical signs or deaths occurred

Repeated dose toxicity

Product:	No data available.
Specified substance(s): gamma- Aminopropyltriethoxysilan e	NOAEL (Rat): 200 mg/kg/d
Specified substance(s): Aminoethyl aminopropyl trimethoxy silane	NOAEL (Rat, Oral, 28 d): >= 500 mg/kg

Skin Corrosion/Irritation

Product:	No data available.
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Serious Eye Damage/Eye Irritation

Product: No data available.

Respiratory or Skin Sensitization

Product: 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.

Specified substance(s):

Tris(3(trimethoxysilyl)propyl)isocyanurate (OECD 471, 490, 487)negative

Specified substance(s):

Dimethyltin neodecanoate Ames-Test (OECD 473): negative

In vivo

Product: No data available.

Specified substance(s):

gamma-Aminopropyltriethoxysilane Micronucleus test (mouse) (Similar to OECD 474): negative (not mutagenic)

Reproductive toxicity

Product: No data available.

Specific Target Organ Toxicity - Single Exposure

Product: No data available.

Specific Target Organ Toxicity - Repeated Exposure

Product: No data available.

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Target Organs

Specific Target Organ Toxicity - Repeated Exposure: Respiratory Tract

Aspiration Hazard

Product: No data available.

Other effects: None known.

12. Ecological information

Ecotoxicity:

Acute hazards to the aquatic environment:

Fish

Product: No data available.

Specified substance(s):

gamma-Aminopropyltriethoxysilane LC 50 (96 h): > 110 mg/l

Aminoethyl aminopropyl trimethoxy silane LC50 (Lepomis macrochirus): > 100 mg/l

Aquatic Invertebrates

Product: No data available.

Specified substance(s):

gamma-Aminopropyltriethoxysilane EC50 (Daphnia, 48 h): > 100 mg/l

Aminoethyl aminopropyl trimethoxy silane EC50 (Daphnia magna, 48 h): 87.4 mg/l

Chronic hazards to the aquatic environment:

Fish

Product: No data available.

Aquatic Invertebrates

Product: No data available.

Toxicity to Aquatic Plants

Product: No data available.

Specified substance(s):

gamma-Aminopropyltriethoxysilane EC50 (72 h): > 3.6 mg/l

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e

Aminoethyl aminopropyl
trimethoxy silane

EC50 (Algae (*Pseudokirchneriella subcapitata*), 96 h): 8.8 mg/l
NOEC (Algae (*Pseudokirchneriella subcapitata*)): 3.1 mg/l

Persistence and Degradability

Biodegradation

Product: No data available.

Specified substance(s):

Tris(3(trimethoxysilyl)propyl)isocyanurate 34 % (28 d) The product is not readily biodegradable.

BOD/COD Ratio

Product: No data available.

Bioaccumulative potential

Bioconcentration Factor (BCF)

Product: No data available.

Partition Coefficient n-octanol / water (log Kow)

Product: No data available.

Specified substance(s):

gamma-Aminopropyltriethoxysilane Log Kow: -0.3 (calculated)

Mobility in soil: No data available.

Known or predicted distribution to environmental compartments

gamma-Aminopropyltriethoxysilane No data available.

Silicic acid, ethyl ester No data available.

Aminoethyl aminopropyltrimethoxy silane No data available.

Tris(3(trimethoxysilyl)propyl)isocyanurate No data available.

Dimethyltin neodecanoate No data available.

Other adverse effects: No data available.

13. Disposal considerations

General information:

The generation of waste should be avoided or minimized wherever possible. Do not discharge into drains, water courses or onto the ground. See Section 8 for information on appropriate personal protective equipment.

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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 or ID number:	UN 1993
UN Proper Shipping Name:	Flammable liquids, n.o.s.(ETHYL SILICATE)
Transport Hazard Class(es)	
Class:	3
Label(s):	3
Packing Group:	III
Marine Pollutant:	No

IMDG

UN number or ID number:	UN 1993
UN Proper Shipping Name:	FLAMMABLE LIQUID, N.O.S.(ETHYL SILICATE)
Transport Hazard Class(es)	
Class:	3
Label(s):	3
EmS No.:	F-E, S-E
Packing Group:	III
Marine Pollutant:	No
Limited quantity	5.00L
Excepted quantity	E1

IATA

UN number or ID number:	UN 1993
Proper Shipping Name:	Flammable liquid, n.o.s.(ETHYL SILICATE)
Transport Hazard Class(es):	
Class:	3
Label(s):	3
Packing Group:	III
Cargo aircraft only Packing	366
Instructions:	
Passenger and cargo aircraft	366
Packing Instructions:	
Limited quantity:	Y344
Packing Instructions:	
Excepted quantity	E1
Environmental Hazards:	Not regulated.
Marine Pollutant:	No

15. Regulatory information

US Federal Regulations

SDS_US

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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>	<u>OSHA hazard(s)</u>
METHYLPOLYSILOXAN E gamma- Aminopropyltriethoxysilan e Aminoethyl aminopropyl trimethoxy silane Tris(3(trimethoxysilyl)prop yl)isocyanurate Polyorganoalkoxysiloxan e	No OSHA Hazards Toxic by ingestion; Corrosive to eyes Skin sensitizer; Corrosive to eyes Toxic by ingestion Toxic by ingestion

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

Flammable (gases, aerosols, liquids, or solids)
Acute toxicity (any route of exposure)
Skin Corrosion or Irritation
Serious eye damage or eye irritation
Respiratory or Skin Sensitization
Specific target organ toxicity (single or repeated exposure)
Hazards Not Otherwise Classified (HNOC)

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>
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US. EPCRA (SARA Title III Section 313 Toxic Chemical Release Inventory (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.

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US State Regulations

US. California Proposition 65



WARNING: This product can expose you to chemicals including Toluene, 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

Chemical Identity

METHYLPOLYSILOXANE

gamma-Aminopropyltriethoxysilane

Silicic acid, ethyl ester

Aminoethyl aminopropyl trimethoxy silane

Tris(3(trimethoxysilyl)propyl)isocyanurate

Dimethyltin neodecanoate

US. Massachusetts RTK - Substance List

No ingredient regulated by MA Right-to-Know Law present.

US. Pennsylvania RTK - Hazardous Substances

Chemical Identity

Silicic acid, ethyl ester

US. Rhode Island RTK

No ingredient regulated by RI Right-to-Know Law present.

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Inventory Status:

Australia AICS:	On or in compliance with the inventory	Remarks: None.
Canada DSL Inventory List:	Q (quantity restricted)	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):	Not 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	*	3
Flammability		2
Physical Hazards		1
PERSONAL PROTECTION		

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

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Issue Date: 05/24/2022

Revision Date: No data available.

Version #: 3.1

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.

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 safehandling, 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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