

TSE3281-G

SAFETY DATA SHEET

1. Identification

Product identifier: TSE3281-G

Other means of identification

Synonyms: Silicone Adhesive

Recommended use and restriction on use

Recommended use: Industrial use

Restrictions on use: Not known.

Manufacturer/Importer/Distributor 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

Not classified

Label Elements

Hazard Symbol: No symbol

Signal Word: none

Hazard Statement: Not applicable

Precautionary Statements

Prevention: Not applicable

Response: Not applicable

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Storage: Not applicable

Disposal: Not applicable

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

3. Composition/information on ingredients

Mixtures

Chemical Identity	CAS number	Content in percent (%) [*]	Notes
(1) Aluminum oxide	1344-28-1	50 - <100%	# This substance has workplace exposure limit(s).
polyvinylsiloxane	68083-19-2	14.146%	# 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. Drink plenty of water. Get medical attention immediately.

Inhalation: If inhaled, move victim to fresh air and seek medical attention.

Skin Contact: Wash with soap and water. Get medical attention if symptoms occur.

Eye contact: Rinse the eye with water immediately. If eye irritation persists: Get medical advice/attention.

Most important symptoms/effects, acute and delayed

Symptoms: No data available.

Hazards: No data available.

Indication of immediate medical attention and special treatment needed

Treatment: There is no specific antidote. Treatment is symptomatic and supportive.

5. Fire-fighting measures

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General Fire Hazards: Use standard firefighting procedures and consider the hazards of other involved materials. Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

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.

Special protective equipment and precautions for firefighters

Special fire fighting procedures: Cool fire-endangered containers with water.

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: Keep container closed. Use only in well-ventilated areas. Avoid contact with skin and eyes. Keep out of reach of children. Remove contact lenses, if present and easy to do. Continue rinsing. See Section 8 of the SDS for Personal Protective Equipment.

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.

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. Wear appropriate personal protective equipment. Protect from moisture.

Conditions for safe storage, including any incompatibilities: Keep in a ventilated and dry location, avoid moisture under any circumstances. Keep container tightly closed. Use original container or packaging of similar material of construction.

8. Exposure controls/personal protection

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Control Parameters

Occupational Exposure Limits

Chemical Identity	Type	Exposure Limit Values	Source
(1) Aluminum oxide - Respirable fraction.	TWA	1 mg/m ³	US. ACGIH Threshold Limit Values, as amended (03 2015)
	PEL	5 mg/m ³	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended (02 2006)
(1) Aluminum oxide - Total dust.	PEL	15 mg/m ³	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended (02 2006)
(1) Aluminum oxide - Respirable fraction.	TWA	5 mg/m ³	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended (1989)
(1) Aluminum oxide - Total dust.	TWA	10 mg/m ³	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended (1989)
(1) Aluminum oxide - Respirable fraction.	TWA	5 mg/m ³	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A, as amended (06 2008)
(1) Aluminum oxide - Total dust.	TWA	10 mg/m ³	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A, as amended (06 2008)
(1) Aluminum oxide - Particulate.	AN ESL	5 µg/m ³	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended (11 2016)
	ST ESL	50 µg/m ³	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended (11 2016)
(1) Aluminum oxide - Respirable fraction.	TWA PEL	5 mg/m ³	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants, as amended (01 2015)
(1) Aluminum oxide - Total dust.	TWA PEL	10 mg/m ³	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants, as amended (01 2015)
	TWA	50 millions of particles per cubic foot of air	US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (03 2016)
(1) Aluminum oxide - 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)
	TWA	5 mg/m ³	US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (03 2016)
(1) Aluminum oxide - Total dust.	TWA	15 mg/m ³	US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (03 2016)

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

Eye wash facilities and emergency shower must be available when handling this product.

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.

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Eye/face protection:	Safety glasses with side shields
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:	Ensure adequate ventilation, especially in confined areas. Wash hands after handling. When using do not eat, drink or smoke.

9. Physical and chemical properties

Appearance

Physical state:	liquid
Form:	liquid
Color:	Gray
Odor:	Faint
Odor threshold:	No data available.
pH:	No data available.
Melting point/freezing point:	No data available.
Initial boiling point and boiling range:	Not applicable
Flash Point:	ca. 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.
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:	ca. 2.70 g/cm ³
Relative density:	ca. 2.1
Solubility(ies)	
Solubility in water:	Insoluble
Solubility (other):	No data available.

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

Auto-ignition temperature: ca. 450 °C

Decomposition temperature: No data available.

SADT: No data available.

Viscosity, dynamic: No data available.

Viscosity, kinematic: No data available.

Other information

Minimum ignition temperature: 450 °C

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: Avoid contact with acids and oxidizing substances.

Incompatible Materials: Strong Acids, Strong Bases

Hazardous Decomposition Products: 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.

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: Not classified for acute toxicity based on available data.

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.

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):

No carcinogenic components identified

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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.

Aquatic Invertebrates
Product: No data available.

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.

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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) Aluminum oxide No data available.

polyvinylsiloxane 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. 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.

SDS_US

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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.

SARA 311/312 Hazardous Chemical

Chemical Identity

Threshold Planning Quantity

SARA 313 (TRI Reporting)

<u>Chemical Identity</u>	<u>Reporting threshold for other users</u>	<u>Reporting threshold for manufacturing and processing</u>
(1) Aluminum oxide		

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

(1) Aluminum oxide

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polyvinylsiloxane
Cyclotetrasiloxane-2-propanoic acid, .alpha.,2,4,6,6,8-hexamethyl-, 3-(trimethoxysilyl) propyl ester
3-glycidyl-oxypropyl-trimethoxy-silane
Methylhydrogenpolysiloxane

US. Massachusetts RTK - Substance List

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

US. Pennsylvania RTK - Hazardous Substances

Chemical Identity

(1) Aluminum oxide

US. Rhode Island RTK

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

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Inventory Status:

Australia AICS:	n (Negative 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 DSL Inventory List:	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: On TSCA Inventory
Taiwan Chemical Substance Inventory:	y (positive listing)	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	<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: 11/14/2019
Revision Date: No data available.
Version #: 1.11
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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