SAFETY DATA SHEET

1 Product and company identification

Name of chemical (Product name)	:	TSE3281-G
Manufacturer/Importer/Distributor Information	:	Momentive Performance Materials Japan LLC Akasaka Park Building 5-2-20 Akasaka, Minato-ku Tokyo Japan
Contact person	:	commercial.services@momentive.com
Telephone	:	+81-3-5544-3100
Telefax	:	+81-3-5544-3101
Emergency telephone number	:	+81-3-5544-3111 +81-276-31-4118 (night / weekend)
Responsible Department	:	Product Stewardship & Compliance Group

2 Hazard(s) identification

GHS classification:

No classification

GHS label elements:

Pictograms: No symbol

Signal Word: No signal word.

Hazard Statement: Not applicable

Precautionary Statements:

Prevention: Not applicable
Response: Not applicable
Storage: Not applicable
Disposal: Not applicable

Other hazards which do not result in classification:
none

3 Composition/information on ingredients

Chemical nature: Silicone compound

Mixtures

Chemical Identity	CAS number	Concentration*
Aluminum oxide	1344-28-1	80 - 90%

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

4 First-aid measures

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

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

Eye contact: Flush thoroughly with water for at least 15 minutes. Get medical assistance.

Ingestion: Do not induce vomiting. Drink plenty of water. Get medical attention immediately.

Most important symptoms/effects, acute and delayed

Symptoms: No data available.

Hazards: No data available.

5 Fire-fighting measures

Extinguishing media: Extinguish with foam, carbon dioxide or dry powder.

Unsuitable extinguishing media: No data available.

6 Accidental release measures

Personal precautions, protective equipment and emergency procedures: Keep unprotected persons away. Remove sources of ignition. Use personal protective equipment. Keep upwind.

Environmental Precautions: Do not allow runoff to sewer, waterway or ground.

Methods or materials for containment and cleaning up: Put in an empty container for recovery after preventing spill by sand or sandbags,if the amount of spill is large. Put in an empty container for recovery after wiping or soaking up in an inert material,if the amount of spill is small.

Prevention of secondary hazards: Remove sources of ignition.

7 Handling and storage

Handling

Technical measures (e.g. Local and general ventilation): Provide adequate general and local exhaust ventilation. Eyewash bottle with clean water.

Safe handling advice: Wear suitable protective clothing, gloves and eye/face protection. Protect from moisture. Avoid contact with organic compounds containing nitrogen, sulfur, phosphorus,tin and lead, soldering flux, polyvinyl chloride, polyurethane as it may lead to incomplete curing.

Contact avoidance measures: Do not eat, drink or smoke when using the product. Wash hands after handling. Eye washes and showers for emergency use. Avoid contact with skin and eyes.

Hygiene measures: Ensure adequate ventilation, especially in confined areas. Wash hands after handling. When using do not eat, drink or smoke.

Storage

Safe storage conditions: Store at 10°C or less, with the container tightly closed.

Safe packaging materials: No data available.

8 Exposure controls/personal protection

Control Parameters

Occupational Exposure Limits:

Chemical name	Type	Exposure Limit Values	Regulation Sources
Aluminum oxide - Respirable dust.	TWA	0.5 mg/m3	Japan. OELs - JSOH (Recommendation of Occupational Exposure Limits), as amended (05 2014)
Aluminum oxide - Total dust.	TWA	2 mg/m3	Japan. OELs - JSOH (Recommendation of Occupational Exposure Limits), as amended (05 2014)
Aluminum oxide - Dust.	TLV	0.025 mg/m3	Japan. OELs - ISHL. (Workplace Environment Assessment Standards), as amended (04 2020)

Personal protective equipment (ppe)

Respiratory Protection: No protection is ordinarily required under normal conditions of use and with adequate ventilation. Use only in well-ventilated areas. In case of insufficient ventilation, wear suitable respiratory equipment.

Hand Protection: Rubber or plastics gloves

Eye Protection: Safety glasses with side shields

Skin and Body Protection: Chemical resistant clothing Wear rubber boots.

9 Physical and chemical properties

Physical state: liquid

Form: liquid

Color:	Gray
Odor:	Faint
Odor threshold	No data available.
Melting point/freezing point	Not applicable
Initial boiling point and boiling range	Not applicable
Flammability	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.
Flash Point	ca.300 °C
Evaporation rate	No data available.
Auto-ignition temperature	450 °C
Decomposition temperature	No data available.
SADT	No data available.
pH	No data available.
Viscosity, dynamic:	ca. 60,000 mPa·s
Viscosity, kinematic:	No data available.
Solubility(ies)	
Solubility in water:	Insoluble
Solubility (other):	No data available.
Partition coefficient (n-octanol/water)Log Pow	No data available.
Vapor pressure	No data available.
Density	2.07 g/cm3
Relative density	ca. 2.1
Vapor density	No data available.
Other information	
Minimum ignition temperature:	450 °C

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:	The catalysis of strong acids or bases cause polymerization or decomposition. The cure is promoted at high temperature.

Hazardous Decomposition Products:	Decomposition results in the liberation of hydrogen gas. This product contains methylpolysiloxanes which can generate formaldehyde at approximately 300 degrees Fahrenheit (150'C) and above, in atmospheres which contain oxygen. Formaldehyde is a skin and respiratory sensitizer, eye and throat irritant, acute toxicant, and potential cancer hazard. A SDS for formaldehyde is available from Momentive.

11 Toxicological information

General information:	This product is a mixture containing polymer compounds and hazardous substances as listed in Section 3. The respirable particle(s) listed in Section 3 are inextricably bound within the polymer matrix, and therefore do(es) 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.

Acute toxicity (list all possible routes of exposure)

Oral

Product:	Not classified for acute toxicity based on available data.
Components:	
Aluminum oxide	No data available.

Dermal

Product:	Not classified for acute toxicity based on available data.
Components:	
Aluminum oxide	No data available.

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.
Components:	
Aluminum oxide	No data available.

Serious Eye Damage/Eye Irritation

Product:	No data available.
Components:	
Aluminum oxide	No data available.

Respiratory sensitization

Product:	No data available.
Components:	
Aluminum oxide	No data available.

Skin sensitization

Product: No data available.

Components:
Aluminum oxide No data available.

Carcinogenicity
Product: No data available.

Components:
Aluminum oxide No data available.

Japan Society for Occupational Health: Carcinogen:
No carcinogenic components identified

Japan. ISHL Designated Carcinogen:
No carcinogenic components identified

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:
No carcinogenic components identified

Germ Cell Mutagenicity

In vitro
Product: No data available.

Components:
Aluminum oxide No data available.

In vivo
Product: No data available.

Components:
Aluminum oxide No data available.

Reproductive toxicity
Product: No data available.

Components:
Aluminum oxide No data available.

Specific Target Organ Toxicity - Single Exposure
Product: No data available.

Components:
Aluminum oxide No data available.

Specific Target Organ Toxicity - Repeated Exposure
Product: No data available.

Components:
Aluminum oxide No data available.

Aspiration Hazard
Product: No data available.

Components:
Aluminum oxide 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.

Toxicity to Aquatic Plants
Product: No data available.

Components:
Aluminum oxide No data available.

Toxicity to microorganisms
Product: No data available.

Components
Aluminum oxide 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.

Components:
Aluminum oxide 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.

Hazardous to the ozone layer: Not Regulated

Further Information: 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 methods: This product falls under Industrial Waste based on Wastes Disposal and Public Cleansing Law. Dispose of in accordance with this law and local regulations.

Contaminated Packaging: Dispose of as unused product.

14 Transport information

International regulations

IMDG - International Maritime Dangerous Goods Code

Not regulated.

IATA

Not regulated.

National Regulations
Domestic Standard: In compliance with domestic law.

15 Regulatory information

Japan CSCL:

Priority Assessment Chemical Substances: Not Regulated

Monitoring Chemical Substances: Not Regulated

Law concerning Pollutant Release and Transfer Register:

Specified Class 1 substance(s): Not Regulated

Class 1 Substance(s): Not Regulated
Class 2 Substance(s): Not Regulated

Industrial Safety and Health Act:

Article 57-2 Regulated Substance(s): ALUMINUM OXIDE;

Article 57 Regulated Substance(s) subject to labeling:	ALUMINUM OXIDE
Organic Solvent Regulation	Not Regulated
Specified Substances Regulation:	**Class 1 designated chemical substances:** Not Regulated **Class 2 designated chemical substances:** Not Regulated **Class 3 designated chemical substances:** Not Regulated

Poisonous and Deleterious Substances Control Act:

Specified poisonous substance(s):

Main law:	Not Regulated
Cabinet order:	Not Regulated

Poisonous Substance(s):

Main law:	Not Regulated
Cabinet order:	Not Regulated

Deleterious Substance(s):

Main law:	Not Regulated
Cabinet order:	Not Regulated

Fire Service Law:	Designated combustible materials: Flammable liquid Keep away from fire
High Pressure Gas Safety Law:	Not Regulated
Act on Prevention of Marine Pollution and Maritime Disaster:	Not Regulated

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

Revision Information: ARGHS_JP
Issue Date: 12/09/2021
SDS No.:
Disclaimer:

Notice to reader

This material is developed and manufactured for industrial applications only. For medical or other special applications, use after performing safety testing on the product and confirming safety. Never use for human applications such as implant, impregnation, or where a residue may possibly remain in the body.

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 asa 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 in combination with any other materials or in any process, unless specified in the text.

Literature Reference: No data available.