

TSE322-B

SAFETY DATA SHEET

Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Regulation (EU) No. 2015/830

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Product name: TSE322-B

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses: Coating of electronic parts

Uses advised against: Not known.

1.3 Details of the supplier of the safety data sheet

Manufacturer/Importer/Distributor Information : Momentive Performance Materials GmbH
Chempark Leverkusen Gebaeude V7
DE - 51368 Leverkusen
Germany

Contact person : MomentiveEMEA.productsteward@momentive.com

Telephone : General information
00800.4321.1000 (Customer Service Centre)

1.4

Emergency telephone number : Europe, Israel & All other: +44 (0) 1235239670; Middle East:+44 (0) 1235239671

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

The product has been classified according to the legislation in force.

Classification according to Regulation (EC) No 1272/2008 as amended.

Health Hazards

Specific Target Organ Toxicity -
Repeated Exposure

Category 2¹.

H373: May cause damage to organs through prolonged or repeated exposure.

Target Organs

1. Lung

2.2 Label Elements

Contains: QUARTZ



Signal Words: Warning

Hazard Statement(s): H373: May cause damage to organs through prolonged or repeated exposure.

Precautionary Statements

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Prevention: P260: Do not breathe dust/fume/gas/mist/vapors/spray.

Disposal: P501: 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.

Unknown toxicity - Health

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

Hazard summary

Physical Hazards: No data available.

Health Hazards

Inhalation: None known.

Eye contact: May cause eye irritation.

Skin Contact: Causes mild skin irritation.

Ingestion: None known.

Other Health Effects: No data available.

Environmental Hazards: No data available.

Additional Information: This product is a mixture containing polymer compounds and hazardous substances as listed in section 3. The relevant hazardous classification according to CLP Directive 1272/2008 is stated in section 2 of this SDS. Although the preparation is classified as a hazardous preparation it does not present a danger to human health by inhalation, ingestion or contact with the skin or to aquatic environment in the form in which it is placed on the market. According to Annex I No. 1.3.4.1 of the Directive 1272/2008 such preparations do not require a label.

2.3 Other hazards No data available.

SECTION 3: Composition/information on ingredients

Chemical nature: Polydimethylsiloxane containing vinyl groups, with platinum catalyst, fillers, crosslinker, an inhibitor and pigment(s).

3.2 Mixtures

General information: No data available.

Chemical name	Concentration	CAS-No.	EC No.	REACH Registration No.	M-Factor:	Notes
QUARTZ	20 - <50%	14808-60-7	238-878-4	Exempt	No data available.	#
CYCLOSILOX	1 - <5%	113684-56-3		01-	No data	

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ANE ESTER				0000016083-78-XXXX	available.	
Dodecamethyl cyclohexasiloxane	0,1 - <1%	540-97-6	208-762-8	01-2119517435-42-0001	No data available.	vPvB

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

This substance has workplace exposure limit(s).

PBT: persistent, bioaccumulative and toxic substance.

vPvB: very persistent and very bioaccumulative substance.

Classification

Chemical name	Classification	Notes
QUARTZ	STOT RE: 2: H373;	
CYCLOSILOXANE ESTER	Aquatic Chronic: 4: H413;	
Dodecamethylcyclohexasiloxane	No data available.	

CLP: Regulation No. 1272/2008.

SECTION 4: First aid measures

General: Get medical attention if symptoms occur.

4.1 Description of first aid measures

Inhalation: Move to fresh air. Get medical attention.

Eye contact: Rinse the eye with water immediately. Get medical attention if symptoms occur.

Skin Contact: After contact with skin, remove product mechanically. Wash area with soap and water. Get medical attention if symptoms occur.

Ingestion: Do not induce vomiting. Do not give victim anything to drink if he is unconscious. Get medical attention.

4.2 Most important symptoms and effects, both acute and delayed: None known.

4.3 Indication of any immediate medical attention and special treatment needed

Hazards: No information about adverse effects due to exposure.

Treatment: If swallowed, do NOT induce vomiting. Give a glass of water.

SECTION 5: Firefighting measures

5.1 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.

5.2 Special hazards arising from the substance or mixture: No data available.

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5.3 Advice for firefighters

Special fire fighting procedures:

Keep away from sources of ignition - No smoking. Do not empty into drains.

Special protective equipment for fire-fighters:

Wear self-contained breathing apparatus and protective clothing.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures:

Use personal protective equipment. Wash skin thoroughly with soap and water. Keep container tightly closed and in a well-ventilated place. Caution: Contaminated surfaces may be slippery.

6.2 Environmental Precautions:

Do not allow runoff to sewer, waterway or ground.

6.3 Methods and material for containment and cleaning up:

Caution: Contaminated surfaces may be slippery. Sweep up or vacuum up spillage and collect in suitable container for disposal.

6.4 Reference to other sections:

Remove sources of ignition. Prevent runoff from entering drains, sewers, or streams.

SECTION 7: Handling and storage:

7.1 Precautions for safe handling:

Pack only into unbreakable packing materials (no glass containers !) to avoid contact with substances mentioned in Section 10. Use only in well-ventilated areas. Wear appropriate personal protective equipment. Product may charge electrostatically during pouring or filling. Keep away from food, drink and animal feeding stuffs.

Storage conditions:

Keep away from sources of ignition - No smoking. Keep container tightly closed. Store in original container.

7.2 Conditions for safe storage, including any incompatibilities:

Keep container tightly closed in a cool, well-ventilated place.

Storage Stability:

Material is stable under normal conditions.

7.3 Specific end use(s):

No data available.

SECTION 8: Exposure controls/personal protection

8.1 Control Parameters

Occupational Exposure Limits

Chemical name	Type	Exposure Limit Values	Source
QUARTZ - Respirable.	TWA	0,1 mg/m3	UK. EH40 Workplace Exposure Limits (WELs) (12 2011)
Calcium Carbonate - Respirable.	TWA	4 mg/m3	UK. EH40 Workplace Exposure Limits (WELs) (12 2011)
Calcium Carbonate - Inhalable	TWA	10 mg/m3	UK. EH40 Workplace Exposure Limits (WELs) (12 2011)
Calcium Carbonate - Inhalable dust.	TWA	10 mg/m3	UK. EH40 Workplace Exposure Limits (WELs) (12 2011)
Calcium Carbonate - Respirable dust.	TWA	4 mg/m3	UK. EH40 Workplace Exposure Limits (WELs) (12 2011)
Carbon Black	STEL	7 mg/m3	UK. EH40 Workplace Exposure Limits (WELs) (12 2011)
	TWA	3,5 mg/m3	UK. EH40 Workplace Exposure Limits (WELs) (12 2011)

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Biological Limit Values

None.

8.2 Exposure controls

Appropriate Engineering Controls:

Eyewash bottle with clean water.

Individual protection measures, such as personal protective equipment

General information:

Do not eat, drink or smoke when using the product. Wash hands after handling.

Eye/face protection:

Safety glasses with side-shields conforming to EN166

Skin protection

Hand Protection:

Advice: There is no risk to health due to contact with the chemical. Use hand protection to prevent mechanically injuries.

Other:

No data available.

Respiratory Protection:

No protection is ordinarily required under normal conditions of use and with adequate ventilation.

Hygiene measures:

Observe good industrial hygiene practices. When using do not eat, drink or smoke. 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.

Environmental exposure controls:

No data available.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

Physical state:

liquid

Form:

liquid

Color:

Black

Odor:

Faint

Odor Threshold:

No data available.

pH:

Not applicable

Freezing point:

Not applicable

Boiling Point:

Not applicable

Flash Point:

ca. 300 °C

Evaporation Rate:

No data available.

Flammability (solid, gas):

No data available.

Flammability Limit - Upper (%):

No data available.

Flammability Limit - Lower (%):

No data available.

Vapor pressure:

No data available.

Vapor density (air=1):

No data available.

Density:

ca. 1,27 g/cm³ (25 °C) ca. 1.270 g/cm³ (25 °C)

Relative density:

No data available.

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.
Autoignition Temperature:	450 °C
Decomposition Temperature:	No decomposition if stored and applied as directed.
SADT:	No data available.
Viscosity, dynamic:	No data available.
Viscosity, kinematic:	No data available.
Explosive properties:	No data available.
Oxidizing properties:	No data available.

SECTION 10: Stability and reactivity

10.1 Reactivity:	No data available.
10.2 Chemical Stability:	Material is stable under normal conditions.
10.3 Possibility of hazardous reactions:	Hazardous polymerisation does not occur.
10.4 Conditions to avoid:	No data available.
10.5 Incompatible Materials:	Evolves hydrogen on contact with acids, alkalis, alcohols, powdered metals or, as the case may be, metal oxides.
10.6 Hazardous Decomposition Products:	Carbon oxides Oxides of silicon. Measurements at temperatures above 150°C in presence of air (oxygen) have shown that small amounts of formaldehyde are formed due to oxidative degradation.

SECTION 11: Toxicological information

General information:	Our Experience shows that our Silicone Elastomer products can be handled without risk to health if used properly and if the usual precautions for industrial hygiene are observed.
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Information on likely routes of exposure

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

11.1 Information on toxicological effects

Acute toxicity

Oral

Product:	Not classified for acute toxicity based on available data.
Specified substance(s)	
QUARTZ	No data available.
CYCLOSILOXANE	LD 50 (Rat): 5.000 mg/kg
ESTER	
Dodecamethylcyclohexasiloane	LD 50 (Rat): 2.000 mg/kg

Dermal

Product:	ATEmix: 55.592,62 mg/kg
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Specified substance(s)

QUARTZ	No data available.
CYCLOSILOXANE	LD 50 (Rat): 2.000 mg/kg
ESTER	
Dodecamethylcyclohexasiloxane	LD 50 (Rat): 2.000 mg/kg

Inhalation

Product:	Not classified for acute toxicity based on available data.
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Specified substance(s)

QUARTZ	No data available.
CYCLOSILOXANE	No data available.
ESTER	
Dodecamethylcyclohexasiloxane	No data available.

Repeated dose toxicity

Product:	No data available.
Specified substance(s)	
QUARTZ	No data available.
CYCLOSILOXANE	No data available.
ESTER	
Dodecamethylcyclohexasiloxane	NOAEL (Rat(male and female), Oral): 1.000 mg/kg

Skin Corrosion/Irritation:

Product:	No data available.
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Specified substance(s)

QUARTZ	No data available.
CYCLOSILOXANE	No data available.
ESTER	
Dodecamethylcyclohexasiloxane	OECD-Guideline 404 (Acute Dermal Irritation/Corrosion) (Rabbit, 72 h): No skin irritation

Serious Eye Damage/Eye Irritation:

Product:	No data available.
Specified substance(s)	
QUARTZ	No data available.
CYCLOSILOXANE	(Rabbit): No eye irritation
ESTER	
Dodecamethylcyclohexasiloxane	OECD-Guideline 405 (Acute Eye Irritation/Corrosion) (Rabbit, 72 h): No eye irritation Not irritating

Respiratory or Skin

Sensitization:

Product:	No data available.
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Specified substance(s)

QUARTZ	No data available.
CYCLOSILOXANE	Magnusson-Kligmann (Guinea Pig): Did not cause sensitization on laboratory animals.
ESTER	
Dodecamethylcyclohexasiloxane	Maximisation Test, OECD-Guideline 406 (Skin Sensitisation) (Guinea Pig): negative

Germ Cell Mutagenicity

In vitro

Product:	No data available.
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Specified substance(s)

QUARTZ	No data available.
CYCLOSILOXANE	No data available.
ESTER	
Dodecamethylcyclohexas iloxane	Ames-Test (OECD-Guideline 471 (Genetic Toxicology: Salmonella typhimurium, Reverse Mutation Assay)): negative

In vivo

Product: No data available.

Specified substance(s)

QUARTZ	No data available.
CYCLOSILOXANE	Micronucleus test Oral (Mouse): negative (not mutagenic)
ESTER	
Dodecamethylcyclohexas iloxane	OECD-Guideline 474 (Genetic Toxicology: Micronucleus Test) (OECD- Guideline 474 (Genetic Toxicology: Micronucleus Test)) Intraperitoneal (Mouse, male and female): negative

Carcinogenicity

Product: No data available.

Specified substance(s)

QUARTZ	No data available.
CYCLOSILOXANE	No data available.
ESTER	
Dodecamethylcyclohexas iloxane	No data available.

Reproductive toxicity

Product: No data available.

Specified substance(s)

QUARTZ	No data available.
CYCLOSILOXANE	No data available.
ESTER	
Dodecamethylcyclohexas iloxane	No data available.

Specific Target Organ Toxicity - Single Exposure

Product: No data available.

Specified substance(s)

QUARTZ	No data available.
CYCLOSILOXANE	No data available.
ESTER	
Dodecamethylcyclohexas iloxane	No data available.

Specific Target Organ Toxicity - Repeated Exposure

Product: No data available.

Specified substance(s)

QUARTZ	No data available.
CYCLOSILOXANE	No data available.
ESTER	
Dodecamethylcyclohexas iloxane	No data available.

Target Organs:

QUARTZ Lungs

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Aspiration Hazard

Product: No data available.

Specified substance(s)

QUARTZ No data available.
CYCLOSILOXANE No data available.
ESTER
Dodecamethylcyclohexas
iloxane No data available.

Other effects: No data available.

SECTION 12: Ecological information

12.1 Toxicity

Acute toxicity

Fish

Product: No data available.

Specified substance(s)

QUARTZ No data available.
CYCLOSILOXANE No data available.
ESTER
Dodecamethylcyclohexas
iloxane No data available.

Aquatic Invertebrates

Product: No data available.

Specified substance(s)

QUARTZ No data available.
CYCLOSILOXANE EC50 (Daphnia magna, 48 h): > 8 mg/l
ESTER
Dodecamethylcyclohexas
iloxane No data available.

Chronic Toxicity

Fish

Product: No data available.

Specified substance(s)

QUARTZ No data available.
CYCLOSILOXANE No data available.
ESTER
Dodecamethylcyclohexas
iloxane NOEC (Pimephales promelas, 49 d): 0,0044 mg/l

Aquatic Invertebrates

Product: No data available.

Specified substance(s)

QUARTZ No data available.
CYCLOSILOXANE No data available.
ESTER
Dodecamethylcyclohexas
iloxane NOEC (Daphnia magna, 21 d): 0,0046 mg/l
EC50 (Sediment Invertebrate, 28 d): > 420 mg/l

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LOEC (Sediment Invertebrate, 28 d): ≥ 420 mg/l

Toxicity to Aquatic Plants

Product: No data available.

Specified substance(s)

QUARTZ No data available.

CYCLOSILOXANE No data available.

ESTER

Dodecamethylcyclohexas
iloxane EC50 (Algae (*Pseudokirchneriella subcapitata*), 72 h): $> 0,002$ mg/l (OECD Test Guideline 201)

NOEC (Algae (*Pseudokirchneriella subcapitata*), 72 h): $\geq 0,002$ mg/l (OECD Test Guideline 201)

12.2 Persistence and Degradability

Biodegradation

Product: No data available.

Specified substance(s)

QUARTZ No data available.

CYCLOSILOXANE No data available.

ESTER

Dodecamethylcyclohexas
iloxane No data available.

BOD/COD Ratio

Product No data available.

Specified substance(s)

QUARTZ No data available.

CYCLOSILOXANE No data available.

ESTER

Dodecamethylcyclohexas
iloxane No data available.

12.3 Bioaccumulative potential

Product: No data available.

Specified substance(s)

QUARTZ No data available.

CYCLOSILOXANE No data available.

ESTER

Dodecamethylcyclohexas
iloxane No data available.

12.4 Mobility in soil:

No data available.

Known or predicted distribution to environmental compartments

QUARTZ No data available.

CYCLOSILOXANE ESTER No data available.

Dodecamethylcyclohexasilo
xane No data available.

12.5 Results of PBT and vPvB assessment:

vPvB: very persistent and very bioaccumulative substance.

QUARTZ No data available.

CYCLOSILOXANE ESTER No data available.

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Dodecamethylcyclhexasiloxane	vPvB: very persistent and very bioaccumulative substance.	Dodecamethylcyclhexasiloxane (D6) meets the current EU REACH Annex XIII criteria for vPvB and has been added to the candidate list for Substances of very high concern (SVHC)., <i>However our understanding of the available science is that D6 does not behave similarly to known PBT/vPvB substances. The silicones industries interpretation of the available data is that the weight of scientific evidence from field studies shows that D6 is not biomagnifying in aquatic and terrestrial food webs. D6 in air will degrade by naturally occurring reactions in the atmosphere. Any D6 in air that does not degrade by these reactions is not expected to deposit from the air to water, to land, or to living organisms</i>
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12.6 Other adverse effects: No data available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

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: Can be incinerated when in compliance with local regulations.

SECTION 14: Transport information

ADR

Not regulated.

ADN

Not regulated.

RID

Not regulated.

IMDG

Not regulated.

IATA

Not regulated.

14.6 Special precautions for user: Keep away from food, drink and animal feeding stuffs. This product is not regarded as dangerous goods according to the national and international regulations on the transport of dangerous goods.
This product is not regarded as dangerous goods according to the national and international regulations on the transport of dangerous goods.

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14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code:

Not applicable

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture:

EU Regulations

Regulation (EC) No. 2037/2000 Substances that deplete the ozone layer: none

Regulation (EC) No. 850/2004 on persistent organic pollutants: none

Regulation (EC) No. 649/2012 Import and export of dangerous chemicals: none

Regulation (EC) No. 1907/2006, REACH Annex XIV Substances subject to authorisation, as amended: none

EU. REACH Candidate List of Substances of Very High Concern for Authorization (SVHC):

Chemical name	CAS-No.	Concentration
Dodecamethylcyclohexasiloxane	540-97-6	0 - <=0,1110%

Regulation (EC) No. 1907/2006 Annex XVII Substances subject to restriction on marketing and use: none

Directive 2004/37/EC on the protection of workers from the risks related to exposure to carcinogens and mutagens at work.: none

Directive 92/85/EEC: on the safety and health of pregnant workers and workers who have recently given birth or are breast feeding.: none

Directive 96/82/EC (Seveso III): on the control of major accident hazards involving dangerous substances: none

EU. Regulation No. 166/2006 PRTR (Pollutant Release and Transfer Registry), Annex II: Pollutants: none

Directive 98/24/EC on the protection of workers from the risks related to chemical agents at work: none

15.2 Chemical safety assessment:

No Chemical Safety Assessment has been carried out.

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:	n (Negative 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. Taiwan inventory (CSNN):	y (positive listing)	Remarks: None.

SECTION 16: Other information

Revision Information: Not relevant.

Key literature references and sources for data: No data available.

Wording of the H-statements in section 2 and 3

H226	Flammable liquid and vapor.
H361f	Suspected of damaging fertility.
H373	May cause damage to organs through prolonged or repeated exposure.
H411	Toxic to aquatic life with long lasting effects.
H413	May cause long lasting harmful effects to aquatic life.

Training information: No data available.

Issue Date: 12.08.2018

Disclaimer:

Notice to reader

Unless otherwise specified in section 1.2, Momentive Products are intended for industrial application only.

They are not intended for specific medical applications, neither for long-lasting (> 30 days) implantation into the human body, injected or directly ingested, nor for the manufacture of multiple usable contraceptives.

Further Information

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

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