

TSE3940

SAFETY DATA SHEET

1. Identification of the hazardous chemical and of the supplier

Product identifier: TSE3940

Recommended use of the chemical and restrictions on use

Recommended use: Silicone Elastomer

Recommended restrictions: For industrial use only.

Details of principal suppliers

Manufacturer/Importer/Distributor Information : Momentive Performance Materials (Thailand) Limited
1/2 Moo 4, Asia Industrial Estate, Rayong, 21130
Thailand

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Responsible Department : Product Stewardship & Compliance

2. Hazard(s) identification

GHS classification of substance or mixture, and national or regional information :

Health Hazards

Serious Eye Damage/Eye Irritation Category 2

Unknown toxicity- Environment

Acute hazards to the aquatic environment 0 %

Chronic hazards to the aquatic environment 0 %

GHS label elements

Hazard symbol(s):



Signal Word: Warning

Hazard Statement(s): Causes serious eye irritation.

Precautionary statement(s):

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Prevention: Wash thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection.

Response: If eye irritation persists: Get medical advice/attention.

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

3. Composition and information of the ingredients of the hazardous chemical

Chemical nature: Silicone sealant

Mixtures

Chemical Identity	CAS number	Content in percent (%)*
TITANIUM DIOXIDE	13463-67-7	10 - <30%
CYCLOPENTYLSILAZANE-AMINOSILOXANE COPOLYMER, METHOXY TERMINATED	134759-20-9	1 - <3%
gamma-Aminopropyltriethoxysilane	919-30-2	<1%
Dibutyltin Dilaurate	77-58-7	<1%
Octamethylcyclotetrasiloxane	556-67-2	<1%

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

4. First-aid measures

Description of necessary first-aid measures

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

Skin Contact: Wash with soap and water.

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

Ingestion Call a physician or poison control center immediately. Only induce vomiting at the instruction of medical personnel. Never give anything by mouth to an unconscious person. If swallowed, do NOT induce vomiting. Give a glass of water. Do not give victim anything to drink if he is unconscious. Get medical attention if any discomfort continues.

Most important symptoms/effects, acute and delayed

Symptoms: Treatment is symptomatic and supportive.

Hazards: No data available.

Indication of immediate medical attention and special treatment needed

Treatment: No data available.

5. Fire-fighting measures

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General Fire Hazards: Remove sources of combustibles. Extinguish the fire using fire-fighting media listed above. Cool surrounding tanks, buildings and so on by spraying with water to prevent the fire extension.
 The fire fighting should be done from the windward side, with suitable respiratory protective device, if necessary.

Suitable (and unsuitable) extinguishing media

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

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

Specific hazards arising from the chemical: No data available.

Special protective action for fire fighters

Special fire fighting procedures: No data available.

Special protective equipment for fire-fighters: No data available.

6. Accidental release measures

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

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

Methods and material 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.

Notification Procedures: Remove sources of ignition.

7. Handling and storage

Precautions to ensure safe handling: "Wear eye, hand and respiratory protection when in handling." See Section 8 of the SDS for Personal Protective Equipment. Keep away from sources of ignition - No smoking. Ground container and transfer equipment to eliminate static electric sparks. Protect from moisture. Seal opened containers and use up as soon as possible. Alcohol released during curing. Use only in well-ventilated areas.

Conditions for safe storage, including any incompatibilities: Store in a dark, cool place indoors, with container tightly closed.

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8. Exposure controls/personal protection

Control Parameters

Occupational Exposure Limits

Chemical Identity	Type	Exposure Limit Values	Source
TITANIUM DIOXIDE	Time Weighted Average (TWA):	10 mg/m3	Malaysia. OELs. (Occupational Safety and Health (Use and Standards of Exposure of Chemicals Hazardous to Health) Regulations), as amended 03 2000
Dibutyltin Dilaurate	Time Weighted Average (TWA):	0.1 mg/m3	Malaysia. OELs. (Occupational Safety and Health (Use and Standards of Exposure of Chemicals Hazardous to Health) Regulations), as amended 03 2000
(1) TITANIUM DIOXIDE	TWA	10 mg/m3	US. ACGIH Threshold Limit Values, as amended (03 2015)
Dibutyltin Dilaurate - as Sn	STEL	0.2 mg/m3	US. ACGIH Threshold Limit Values, as amended (03 2015)
	TWA	0.1 mg/m3	US. ACGIH Threshold Limit Values, as amended (03 2015)

Biological Limit Values

None of the components have assigned exposure limits.

Appropriate Engineering Controls:

Provide adequate general and local exhaust ventilation. Eyewash bottle with clean water.

Individual protection measures, such as personal protective equipment

General information: Use only in well-ventilated areas. Wear suitable gloves and eye/face protection.

Eye/face protection: Safety glasses with side shields

Skin Protection

Hand Protection: Chemical resistant gloves Rubber or plastics gloves

Other: Chemical resistant clothing Safety shoes

Respiratory Protection: Gas mask with organic vapor canister and dust and mist filter.

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

9. Physical and chemical properties

Appearance

Physical state: liquid

Form: Paste

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Color:	Gray
Odor:	Alcohol
Odor threshold:	No data available.
pH:	No data available.
Melting point/freezing point:	Not applied
Initial boiling point and boiling range:	Not applied
Flash Point:	98 °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.
Vapor pressure:	Not applied
Vapor density:	No data available.
Density:	1.46 g/cm ³ (25 °C)
Relative density:	1.46
Solubility(ies)	
Solubility in water:	Insoluble
Solubility (other):	Insoluble
Partition coefficient (n-octanol/water) Log Pow:	No data available.
Auto-ignition temperature:	450 °C
Decomposition temperature:	No data available.
SADT:	No data available.
Viscosity, dynamic:	No data available.
Viscosity, kinematic:	> 20.5 mm ² /s (40 °C)

10. Stability and reactivity

Reactivity:	No data available.
Chemical Stability:	Material is stable under normal conditions.
Possibility of hazardous reactions:	No data available.
Conditions to avoid:	Keep away from heat, sparks and open flame.
Incompatible Materials:	Moisture. The catalysis of strong acids or bases cause polymerization or decomposition.
Hazardous Decomposition Products:	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 MSDS for formaldehyde is available from Momentive.

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11. Toxicological information

General information: In serious cases absorption of methanol in the body may lead to damage to the eyesight.

Information on likely routes of exposure

Inhalation: No data available.

Skin Contact: No data available.

Eye contact: No data available.

Ingestion: No data available.

Symptoms

Inhalation: No data available.

Skin Contact: No data available.

Eye contact: No data available.

Ingestion: No data available.

Information on toxicological effects

Acute toxicity (list all possible routes of exposure)

Oral

Product: No data available.

Specified substance(s):

TITANIUM DIOXIDE LD 50 (Rat): > 10,000 mg/kg

CYCLOPENTYLSILAZA LD 50 (Rat): 4,666 mg/kg

NE-AMINOSILOXANE

COPOLYMER,

METHOXY

TERMINATED

Dibutyltin Dilaurate LD 50 (Rat): 2,071 mg/kg

Octamethylcyclotetrasiloxane LD 50 (Rat): > 4,800 mg/kg

Dermal

Product: No data available.

Specified substance(s):

TITANIUM DIOXIDE LD 50 (Rabbit): > 10,000 mg/kg

Dibutyltin Dilaurate LD 50 (Rat): 750 mg/kg

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LD 50 (Rat): 1,000 mg/kg
 LD 50 (Rat): > 2,000 mg/kg

Octamethylcyclotetrasiloxane LD 50 (Rat): > 2,375 mg/kg

Inhalation
Product: No data available.

Specified substance(s):
 TITANIUM DIOXIDE LC50 (Rat, 4 h): > 6.8 mg/l

Octamethylcyclotetrasiloxane LC50 (Rat, 4 h): 36 mg/l

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.

ACGIH Sensitization

Carcinogenicity
Product: No data available.

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

Germ Cell Mutagenicity

In vitro
Product: No data available.

Specified substance(s):
 Octamethylcyclotetrasiloxane Ames-Test (OECD-Guideline 471 (Genetic Toxicology: Salmonella typhimurium, Reverse Mutation Assay)): negative (not mutagenic)
 Mouse Lymphoma Assay (OECD Guideline 476): negative (not mutagenic)

In vivo
Product: No data available.

Specified substance(s):
 Octamethylcyclotetrasiloxane Chromosomal aberration (OECD-Guideline 474 (Genetic Toxicology: Micronucleus Test)) Inhalation (Rat, male and female): negative

Reproductive toxicity
Product: No data available.

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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:

Contains dibutyl tin dilaurate which may cause birth defects and reproductive effects based on animal data.

12. Ecological information

Ecotoxicity

Acute hazards to the aquatic environment

Fish

Product: No data available.

Aquatic Invertebrates

Product: No data available.

Specified substance(s):

gamma-Aminopropyltriethoxysilane EC50 (Daphnia magna, 48 h): 331 mg/l

Dibutyltin Dilaurate EC50 (Daphnia magna, 48 h): < 0.463 mg/l Fresh water

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.

Persistence and Degradability

Biodegradation

Product: No data available.

BOD/COD Ratio

Product: No data available.

Bioaccumulative potential

Bioconcentration Factor (BCF)

Product: No data available.

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Partition Coefficient n-octanol / water (log Kow)

Product: No data available.

Mobility

Mobility in soil: No data available.

Known or predicted distribution to environmental compartments

TITANIUM DIOXIDE No data available.

CYCLOPENTYLSILAZANE No data available.

-AMINOSILOXANE

COPOLYMER, METHOXY

TERMINATED

gamma- No data available.

Aminopropyltriethoxysilane

Dibutyltin Dilaurate No data available.

Octamethylcyclotetrasiloxa

ne

Other adverse effects: No data available.

13. Disposal information

Disposal methods

Disposal instructions: Can be incinerated when in compliance with local regulations. This material is developed and manufactured for industrial applications only.

Contaminated Packaging: Dispose of as unused product.

14. Transport information

ADR

Not regulated.

IATA

Not regulated.

IMDG

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. Protect from moisture. Keep away from food, foodstuff, acids and bases. keep away from odour sensitive materials

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

Not applicable

15. Regulatory information

Malaysia. Medical Surveillance Chemicals, Occupational Safety and Health (Use and Standards of Exposure of Chemicals Hazardous to Health): Schedule 2

Not Regulated

Malaysia. Prohibited Use of Substances [Occupational Safety and Health (Prohibition of Use of Substance) Order]

Not Regulated

Malaysia. Controlled Precursors Subject to Conditional Exports (Customs (Prohibition of Exports) Order, Second Schedule, as amended

Not Regulated

Malaysia. Controlled Precursors Subject to Conditional Imports (Customs (Prohibition of Imports) Order, Part I of Second Schedule)

Not Regulated

Malaysia. CWC. Chemical Weapons Convention Act 2005, (Schedules 1-3)

Not Regulated

Malaysia. Ozone Depleting Substances (ODS) (Environmental Quality (Prohibition on the Use of CFC and Other Gases as Propellants and Blowing Agents) Order 1993)

Not Regulated

Malaysia. Lists of Halon Management (Environmental Quality (Halon Management) Regulation 1999)

Not Regulated

Malaysia. Refrigerant Hazardous Substance (Environmental Quality (Refrigerant Management) Regulation), as amended

Not Regulated

Malaysia. Active Ingredients of Pesticide Product (Pesticide Act 1974, First Schedule), as amended

Not Regulated

International regulations

Montreal protocol

Not applicable

Stockholm convention

Not applicable

Rotterdam convention

Not applicable

Kyoto protocol

Not applicable

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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:		
Korea Existing Chemicals Inv. (KECI):	y (positive listing)	Remarks: None.
Canada DSL Inventory List:	q (quantity restricted)	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.

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

Issue Date:	2021/05/19
Revision Date:	No data available.No data available.
Version #:	1.1
Source of information:	No data available.
Further Information:	No data available.
Disclaimer:	

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