

TSE387-B

SAFETY DATA SHEET

1 Product and company identification

Name of chemical (Product name): TSE387-B

Manufacturer : Momentive Performance Materials Japan LLC
 Akasaka Park Building
 5-2-20 Akasaka, Minato-ku
 Tokyo Japan

Distributor Information : DC Products Pty Limited
 Unit 117 45 Gilby Road
 Mount Waverley 3149 Australia

Contact person : Viren Kumar

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Emergency telephone number

Supplier : 61 418 529 118

2 Hazard(s) identification

GHS classification:

Health Hazards	Serious Eye Damage/Eye Irritation	Category 2A
	Skin sensitizer	Category 1

GHS label elements

Symbol(s):



Signal Word: Warning

Hazard Statement(s): Causes serious eye irritation.
 May cause an allergic skin reaction.

Precautionary Statements

Prevention: Wear protective gloves. Wear eye protection/face protection. Avoid breathing vapors. Wash hands thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace.

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Response: IF ON SKIN: Wash with plenty of water. Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get medical advice/attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

Storage: not applicable

Disposal: 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.

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

Main symptoms and emergency overview

Main symptoms: No data available.

Emergency Overview: No data available.

3 Composition/information on ingredients

Chemical nature: Silicone compound

Mixtures

Chemical Identity	CAS number	Concentration*
Silica	Trade secret	1 - 10%
Oxime silane	Trade secret	1.0 - 10%
Aminoethyl aminopropyl trimethoxy silane	1760-24-3	0.1 - 1.0%
Carbon Black	1333-86-4	0.1 - 1.0%
ETHYL METHYL KETOXIME	96-29-7	0.1 - 1.0%

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

Trade secret information: ** A specific chemical identity and/or percentage of composition has been withheld as a trade secret.

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4 First-aid measures

- Inhalation:** "If inhaled, move victim to fresh air and seek medical attention."
- Eye contact:** In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- Skin Contact:** Wash the skin immediately with soap and water. Get medical attention promptly if symptoms occur after washing.
- Ingestion:** Do not induce vomiting. Get medical attention immediately.

Most important symptoms/effects, acute and delayed

- Symptoms:** None known.
- 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:** 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.

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Safe handling advice: "Wear eye, hand and respiratory protection when in handling." Keep away from sources of ignition - No smoking. Protect from moisture. Seal opened containers and use up as soon as possible. This product release Methyl Ethyl Ketoxime during curing. Use only in well-ventilated areas. Avoid inhalation of vapors and spray mists.

Contact avoidance measures: No data available.

Hygiene measures: No data available.

Storage

Safe storage conditions: Store in a dark, cool place indoors, with 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
Carbon Black - Respirable dust.	TWA	1 mg/m3	Japan. OELs - JSOH. (Japan Society of Occupational Health: Advisory Opinion on Permissible [Exposure] Limits) (05 2014)
Carbon Black - Total dust.	TWA	4 mg/m3	Japan. OELs - JSOH. (Japan Society of Occupational Health: Advisory Opinion on Permissible [Exposure] Limits) (05 2014)

Personal protective equipment (ppe)

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

Eye Protection: Safety glasses with side shields

Hand Protection: No data available.

Skin and Body Protection: Chemical resistant clothing Safety shoes

9 Physical and chemical properties

Appearance

Physical state: liquid

Form: liquid

Color: Black

Odor: Faint

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Odor threshold:	No data available.
pH:	No data available.
Melting point/freezing point:	Not applied
Initial boiling point and boiling range:	Not applied not applicable
Flash Point:	162 °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
Density:	1.03 g/cm ³ (23 °C)
Vapor density:	No data available.
Relative density:	1.03
Solubility(ies)	
Solubility in water:	immiscible
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:	60,000 mm ² /s (23 °C)

10 Stability and reactivity

Reactivity:	No data available.
Chemical Stability:	No data available.
Possibility of hazardous reactions:	No data available.
Conditions to avoid:	Keep away from sources of ignition - No smoking.
Incompatible Materials:	Moisture. The catalysis of strong acids or bases cause polymerization or decomposition.

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Hazardous Decomposition Products:

Reacts with water/moisture liberating Methylethylketoxime (MEKO) = 2-Butanone-oxime. 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 toxicological effects

Acute toxicity (list all possible routes of exposure)

Oral

Product: No data available.
Specified substance(s):
 Silica LD 50 (Rat: > 15,000 mg/kg)
 Aminoethyl aminopropyl trimethoxy silane LD 50 (Rat: 2,995 mg/kg (OPPTS 870.1100))
 ETHYL METHYL KETOXIME LD 50 (Rat, No data available.): ca. 2,500 mg/kg (No data available.)

Dermal

Product: No data available.
Specified substance(s):
 Aminoethyl aminopropyl trimethoxy silane LD 50 (Rabbit: > 2,000 mg/kg)
 ETHYL METHYL KETOXIME LD 50 (Rat, No data available.): > 500 mg/kg (No data available.)

Inhalation

Product: No data available.

Repeated dose toxicity

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

Skin Corrosion/Irritation

Product: No data available.

Serious Eye Damage/Eye Irritation

Product: No data available.

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Respiratory or Skin Sensitization

Product: No data available.

Carcinogenicity

Product: No data available.

Japan Society for Occupational Health: Carcinogen:

Carbon Black Overall evaluation: 2B. Possibly carcinogenic to humans.

Japan. ISHL Designated Carcinogen:

No carcinogenic components identified

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:

Carbon Black Overall evaluation: 2B. Possibly carcinogenic to humans.

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:

Toxicity of methyl ethyl ketoxime (MEKO) liberated when the material is in touch with water or moisture in the air, or the material is curing. SKIN CONTACT: May cause mild skin irritation. EYE CONTACT: Causes severe eye irritation may damage tissue. ACUTE ORAL TOXICITY: LD50 = 4ml/kg (rat). ACUTE INHALATION: 4-hr LC50 = > 4.8mg/l (rat). INHALATION TOXICITY: Narcotic(central nervous system)effects in high concentrations.Effects were reversible when exposure was ended.Prolonged overexposure causes adverse effects on the blood. SKIN SENSITIVITY: Positive (guinea pig).No allergic reaction to humans.CARCINOGENICITY: A lifetime (about two years) inhalation study in male and female mice and rats revealed that liver tumors were

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observed in male mice and rats at a high exposure level of 375 ppm. OTHER LONG-TERM EXPOSURE TESTS: Atrophy of nasal epithelium cells was observed in both mice and rats at all concentrations. The effect appeared reversible at lower concentrations. PERMISSIBLE CONCENTRATION: TWA 3 ppm (supplier's recommended value), Keep well ventilated (STEL 10 ppm or less). The WEEL recommended value of AIHA is TWA 10 ppm.

12 Ecological information

Ecotoxicity:

Acute hazards to the aquatic environment

Fish

Product: No data available.

Specified substance(s):

Silica	LC0 (Brachydanio rerio, 96 h): 5,000 mg/l
Aminoethyl aminopropyl trimethoxy silane	LC50 (Lepomis macrochirus): > 100 mg/l
ETHYL METHYL KETOXIME	LC50 (No data available., 96 h): 48 mg/l

Aquatic Invertebrates

Product: No data available.

Specified substance(s):

Aminoethyl aminopropyl trimethoxy silane	EC50 (Daphnia magna, 48 h): 87.4 mg/l
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Chronic hazards to the aquatic environment

Fish

Product: No data available.

Specified substance(s):

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

Product: No data available.

Toxicity to Aquatic Plants

Product: No data available.

Persistence and Degradability

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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

Mobility in soil: No data available.

Known or predicted distribution to environmental compartments

Silica No data available.

Oxime silane No data available.

Aminoethyl aminopropyl No data available.

trimethoxy silane

Carbon Black No data available.

ETHYL METHYL No data available.

KETOXIME

Hazardous to the ozone layer: No data available.

Other adverse effects: No data available.

13 Disposal considerations

General information: none

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: No data available.

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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

Law concerning Pollutant Release and Transfer Register

PRTR and Promotion of Chemical Management Law, new regulated substances (Cabinet Order No. 356, 2008):

Specified Class 1 substance(s): not applicable

Class 1 Substance(s): not applicable

Class 2 Substance(s): not applicable

Industrial Safety and Health Act:

Article 57-2 Regulated Substance(s): Silica, Carbon black,

Article 57 Regulated Substance(s) subject to labeling: Silica,

ISHL Organic Solvents

ISHL Designated or Specified Chemical Substances

Poisonous and Deleterious Substances Control Act:

Specified poisonous substance(s):

Main law: not applicable

Cabinet order: not applicable

Poisonous Substance(s): Main

law: not applicable **Cabinet**

order: not applicable

Deleterious Substance(s): Main

law: not applicable **Cabinet**

order: not applicable

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High Pressure Gas Safety Law

not applicable

Fire Service Law:

Class 4, Group 3 oils Non-water soluble No fire

Japan CSCL: Priority Assessment Chemical Substances: not applicable

Act on Prevention of Marine Pollution and Maritime Disaster: not applicable

Inventory Status

Australia AICS:	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 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:	q (quantity restricted)	Remarks: Low Volume Exemption
Taiwan. Taiwan inventory (CSNN):	y (positive listing)	Remarks: None.

16 Other Information

OTHER INFORMATION: "Wear eye, hand and respiratory protection when in handling."

Revision Information:

Issue Date: 11/08/2016

SDS No.:

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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

"Wear eye, hand and respiratory protection when in handling."

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.

Literature Reference: No data available.