SAFETY DATA SHEET

1 Product and company identification

Name of chemical (Product name): TSE260-3U*

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	:	+81-276-31-1468 +81-276-31-4118 (night / weekend)
Responsible Department	:	Product Stewardship & Compliance Group

2 Hazard(s) identification

GHS classification:

GHS label elements

Symbol(s):

Signal Word: none

Hazard Statement(s):

Precautionary Statements

Prevention: Not applicable

Response: Not applicable

Storage: Not applicable

Disposal: Not applicable

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*
Octamethylcyclotetrasiloxane	556-67-2	>=0.1 - <1%

* 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.

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

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

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

Most important symptoms/effects, acute and delayed

Symptoms: No data available.

Hazards: No data available.

Notes to the physician: Treatment is symptomatic and supportive.

5 Fire-fighting measures

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

Unsuitable extinguishing media: No data available.

Unusual Fire & Explosion Hazards: In case of fire, carbon monoxide and carbon dioxide may be formed.

Special fire fighting procedures: 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.

Protective Measures:	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

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:	Avoid discharge into drains, water courses or onto the ground.
Methods or materials for containment and cleaning up:	Sweep up or vacuum up spillage and collect in suitable container for disposal.
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.
Contact avoidance measures:	Do not eat, drink or smoke when using the product. Wash hands after handling.
Hygiene measures:	Do not eat, drink or smoke when using the product. Wash hands after handling.

Storage

Safe storage conditions:	Store in a dark, cool place indoors, with container tightly closed. Keep away from food, drink and animal feeding stuffs.
Safe packaging materials:	No data available.

8 Exposure controls/personal protection

Control Parameters

Occupational Exposure Limits:
None known.

Personal protective equipment (ppe)

Respiratory Protection:	Not applied
Eye Protection:	Safety glasses with side shields

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

9 Physical and chemical properties

Appearance	
Physical state:	solid
Form:	solid
Color:	Colorless
Odor:	Faint
Odor threshold:	No data available.
pH:	No data available. No data available.
Melting point/freezing point:	Not applied
Initial boiling point and boiling range:	Not applicable
Flash Point:	Not applicable
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:	1.10 g/cm3 (23 °C)
Vapor density:	No data available.
Relative density:	No data available.
Solubility(ies)	
Solubility in water:	Insoluble
Solubility (other):	Toluene
Partition coefficient (n-octanol/water) Log Pow:	No data available.
Auto-ignition temperature:	Not applied
Decomposition temperature:	No data available.
SADT:	No data available.
Viscosity, dynamic:	No data available.
Viscosity, kinematic:	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 polymerisation does not occur.
Conditions to avoid:	Heat. Sunlight. Moisture.
Incompatible Materials:	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.

11 Toxicological information

Information on toxicological effects

Acute toxicity (list all possible routes of exposure)

Oral

Product:	No data available.
Specified substance(s):	
Octamethylcyclotetrasiloxane	LD 50 (Rat: 4,800 mg/kg (OECD-Guideline 401 (Acute Oral Toxicity)) Not classified

Dermal

Product:	No data available.
Specified substance(s):	
Octamethylcyclotetrasiloxane	LD 50 (Rat: > 2,400 mg/kg (OECD Test Guideline 402) Not classified

Inhalation

Product:	No data available.
Specified substance(s):	
Octamethylcyclotetrasiloxane	LC50 (Rat, 4 h): 36 mg/l (OECD Test Guideline 403)

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.

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.

Specified substance(s):

Octamethylcyclotetrasiloxane	Ames-Test (OECD-Guideline 471 (Genetic Toxicology: Salmonella typhimurium, Reverse Mutation Assay)): negative (not mutagenic) Mouse Lymphoma Assay (OECD Guidline 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.

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.

Specified substance(s):

Octamethylcyclotetrasiloxane	Octamethylcyclotetrasiloxane (D4) Ingestion: Rodents given large doses via oral gavage of Octamethylcyclotetrasiloxane (1600mg/kg/day,14 days), developed increased liver weights relative to unexposed control animals due to hepatocellular hyperplasia (increased number of liver cells which appear normal) as well as hypertrophy (increased cell size). Inhalation: In inhalation studies, laboratory rodents exposed to Octamethylcyclotetrasiloxane (300 ppm five days/week, 90 days) developed increased liver weights in female animals relative to unexposed control animals. When the exposure was stopped, liver weights returned to normal. Microscopic examination of the liver cells did not show any evidence of pathology. This response in rats, which does not affect the animal's health, is well-documented and widely recognized. It is related to an increase of liver enzymes that metabolize and eliminate a material from the body. The increased liver weight reverses even while the D4 exposure continues. The finding is not adverse, but is considered a natural adaptive change in rats, and does not represent a hazard to humans. Inhalation studies utilizing laboratory rabbits and guinea pigs showed no effects on liver weights. Inhalation exposures typical of industrial usage (5-10 ppm) showed no toxic effects in rodents. Range finding reproductive studies were conducted (whole body inhalation, 70 days prior to mating, through mating, gestation and lactation), with D4. Rats were exposed to 70 and 700 ppm. In the 700 ppm group, there was a statistically significant reduction in mean litter size and in implantation sites. No D4 related clinical signs were observed in the pups and no exposure related pathological findings were found. A two-year, combined chronic/carcinogenicity study, during which rats were exposed to D4 by inhalation, data showed a statistically significant increase in a benign uterine tumor in female rats exposed at the highest level--a level much higher than the low levels that consumers or workers may encounter. An expert panel of independent scientists who have reviewed the results of this research concur that the finding seen in the two-year study occurred through a biological pathway that is specific to the rat and is not relevant to humans. Therefore, this observed effect does not indicate a potential health hazard to humans. In developmental toxicity studies, rats and rabbits were exposed to D4 at concentrations up to 700 ppm and 500 ppm, respectively. No teratogenic effects (birth defects) were observed in either study.

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.

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
Mobility in soil: No data available.

Known or predicted distribution to environmental compartments
Octamethylcyclotetrasiloxane No data available.

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.

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): None Reported
Article 57 Regulated Substance(s) subject to labeling: None Reported

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

High Pressure Gas Safety Law
Not applicable

Fire Service Law:
Not applicable

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 Inv. 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.

16 Other Information

Revision Information:
Issue Date: 06/11/2018
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 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.