# SAFETY DATA SHEET

## 1. Identification

**Product identifier** **KF-96-500CS**

**Other means of identification**

**Sales Code** 0178S1

**Recommended use of the chemical and restrictions on use**

**Recommended use** Fluids,Modified silicone fluids
Resin modifier ,
Defoaming agent ,
Polishing agent ,
Powder processing agent ,
Water repellent ,
Textile treatment ,
Heating medium ,
Release agent ,
Cutting oil ,
Lubricating oil ,
Hydraulic oil ,
Damper oil ,
Cosmetic additive ,
Paint additive

**Recommended restrictions** Industrial use only.

**Manufacturer/Importer/Supplier/Distributor information**

**MANUFACTURER**

**COMPANY NAME** Shin-Etsu Chemical Co., Ltd.
**CONTACT** Quality Assurance Department（Gunma Complex）
**ADDRESS** 13-1, Isobe 2-chome, Annaka-shi, Gunma 379-0195, JAPAN
**TELEPHONE NUMBER** +81(0)27-385-2172
**FAX NUMBER** +81(0)27-385-2753

**SUPPLIER**

**COMPANY NAME** Shin-Etsu Singapore PTE Ltd.
**ADDRESS** 4 Shenton Way #10-03/06, SGX Centre II, Singapore 068807
**TELEPHONE NUMBER** +65-6743-7277
**EMERGENCY** +65-6743-7277

## 2. Hazards identification

**GHS classification**

**Physical hazards** Not classified.
**Health hazards** Not classified.
**Environmental hazards** Not classified.

**GHS label elements, including precautionary statements**

**Pictograms** None.
**Signal word** None.
**Hazard statements** None.
**Other hazards which do not result in classification** None known.
**Supplemental information** None.

## 3. Composition/information on ingredients

**Substance or mixture** Substance

| Chemical name | Common name and synonyms | CAS Number | Concentration (%) |
|---|---|---|---|
| Dimethylpolysiloxane | | 63148-62-9 | 100 |

## 4. First-aid measures

**Inhalation** Under normal conditions of intended use, this material is not expected to be an inhalation hazard.

**Skin contact** Wash skin with soap and water.

**Eye contact** Rinse immediately with plenty of water for at least 15 minutes. Get medical attention if irritation develops and persists.

**Ingestion** Rinse mouth. Get medical attention immediately.

**Most important symptoms/effects, acute and delayed** Not available.

**Indication of immediate medical attention and special treatment needed** Treat symptomatically.

**General information** Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

## 5. Fire-fighting measures

**Suitable extinguishing media** Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).

**Unsuitable extinguishing media** Do not use a solid water stream as it may scatter and spread fire.

**Specific hazards arising from the chemical** By heating and fire, harmful vapors/gases may be formed.

**Fire fighting equipment/instructions** Move containers from fire area if you can do so without risk.

**Special protective equipment and precautions for firefighters** Firefighters must use standard protective equipment including flame retardant coat, helmet, gloves, rubber boots, and self-contained breathing apparatus.

## 6. Accidental release measures

**Personal precautions, protective equipment and emergency procedures** Wear appropriate personal protective equipment.

**Environmental precautions** Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.

**Methods and materials for containment and cleaning up** Eliminate sources of ignition.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills in original containers for re-use.

## 7. Handling and storage

**Precautions for safe handling** Provide adequate ventilation. Use adequate ventilation when this product is heated at approximately 150 °C (300 °F) and above in the presence of air. Use care in handling/storage. Do not breathe mist or vapor. Avoid prolonged exposure.

**Conditions for safe storage, including any incompatibilities** Keep container tightly closed. Store in a cool, dry place out of direct sunlight. Store away from incompatible materials (see Section 10 of the SDS). Keep in original container.

## 8. Exposure controls/personal protection

**Control parameters/Occupational exposure limits** No exposure limits noted for ingredient(s).

**Appropriate engineering control measures** Provide adequate general and local exhaust ventilation. Provide eyewash station.

**Individual protection measures, such as personal protective equipment**

**Eye/face protection** Wear safety glasses with side shields (or goggles).

**Skin protection**

**Hand protection** Wear protective gloves.

**Other** Wear suitable protective clothing.

| | |
|---|---|
| **Respiratory protection** | If ventilation is insufficient when heating use chemical respirator with organic vapor cartridge. |
| **Thermal hazards** | Wear appropriate thermal protective clothing, when necessary. |
| **General hygiene considerations** | Wash hands before breaks and immediately after handling the product. Handle in accordance with good industrial hygiene and safety practice. This product can generate formaldehyde at approximately 150 °C (300 °F) and above in the presence of air. Formaldehyde is a skin and respiratory sensitizer, eye and throat irritant, acute toxicant and potential cancer hazard. So, use adequate ventilation or wear protective equipment such as gloves, goggles, organic vapor respirator or protective clothing when this product is heated at approximately 150 °C (300 °F) and above in the presence of air. |

## 9. Physical and chemical properties

| | |
|---|---|
| **Appearance** | |
| **Form** | Liquid. |
| **Color** | Colorless. Clear. |
| **Odor** | Odorless |
| **Odor threshold** | Not available. |
| **pH** | Not measurable (Refer to water solubility) |
| **Melting point/freezing point** | No data |
| **Initial boiling point and boiling range** | No data |
| **Flash point** | > 201.2 °F (> 94 °C) Closed Cup<br>> 572 °F (> 300 °C) Open Cup |
| **Evaporation rate** | Negligible (Butyl Acetate=1) |
| **Flammability (solid, gas)** | Not applicable. |
| **Flammability limit - lower (%)** | No data |
| **Flammability limit - upper (%)** | No data |
| **Explosive limit - lower (%)** | No data |
| **Explosive limit - upper (%)** | No data |
| **Vapor pressure** | Negligible ( 25 °C ) |
| **Vapor density** | Not applicable |
| **Relative density** | 0.97 ( 25 °C ) |
| **Solubility(ies)** | |
| **Solubility (water)** | Not soluble (<1 ppm) |
| **Partition coefficient (n-octanol/water)** | No data |
| **Auto-ignition temperature** | about 400°C (752°F) |
| **Decomposition temperature** | Not available. |
| **Viscosity** | 500 mm2/s ( 25 °C ) |
| **Other data** | |
| **Molecular weight** | No data |

## 10. Stability and reactivity

| | |
|---|---|
| **Reactivity** | No hazardous reaction known under normal conditions of use, storage and transport. |
| **Chemical stability** | Stable at normal conditions. |
| **Possibility of hazardous reactions** | Hazardous polymerization does not occur. |
| **Conditions to avoid** | Not available. |
| **Incompatible materials** | Strong oxidizing agents. |
| **Hazardous decomposition products** | Thermal breakdown of this product during fire or very high heat condition may evolve the following hazardous decomposition product:<br>Carbon oxides and traces of incompletely burned carbon compounds. Silicon dioxide.<br>Formaldehyde . |

## 11. Toxicological information

**Information on likely routes of exposure**

| | |
|---|---|
| **Inhalation** | No significant effects are expected. |

| | |
|---|---|
| **Skin contact** | No significant effects are expected. |
| **Eye contact** | No significant effects are expected. |
| **Ingestion** | No significant effects are expected. |

**Acute toxicity**

| Product | Species | Test Results |
|---|---|---|
| KF-96-500CS | | |
| **Acute** | | |
| **Oral** | | |
| LD50 | Rat | > 5 g/kg (Estimated by similar product) |

| | |
|---|---|
| **Symptoms** | Not available. |
| **Skin corrosion/irritation** | SKIN-RABBIT :No skin irritation (Estimated by similar product) |
| **Serious eye damage/eye irritation** | Not classified.(Rabbit) (Estimated by similar product) |
| **Respiratory or skin sensitization** | |
| **Respiratory sensitization** | Not available. |
| **Skin sensitization** | Not available. |
| **Germ cell mutagenicity** | Negative(Bacteria) (Estimated by similar product) |
| **Carcinogenicity** | No carcinogenicity (Estimated by similar product) |
| **Reproductive toxicity** | Not available. |
| **Specific target organ toxicity - single exposure** | Not available. |
| **Specific target organ toxicity - repeated exposure** | Not available. |
| **Aspiration hazard** | Not available. |
| **Chronic effects** | Not available. |
| **Other information** | This product can generate formaldehyde at approximately 150 °C (300 °F) and above in the presence of air. Formaldehyde is a skin and respiratory sensitizer, eye and throat irritant, acute toxicant and potential cancer hazard. So, use adequate ventilation or wear protective equipment such as gloves, goggles, organic vapor respirator or protective clothing when this product is heated at approximately 150 °C (300 °F) and above in the presence of air. |

## 12. Ecological information

| | |
|---|---|
| **Ecotoxicity** | None known. |
| **Persistence and degradability** | May cause decomposition in dry soils. (Estimated by similar product) |
| **Bioaccumulative potential** | No bioaccumulation (Estimated by similar product) |
| **Mobility in soil** | No data available. |
| **Mobility in general** | No data available. |
| **Other adverse effects** | Not available. |

## 13. Disposal considerations

| | |
|---|---|
| **Disposal methods/information** | Incinerate. Incinerator should be appropriately equipped for silica and other fine powder which the product will generate in incineration. Workers should wear appropriate personal protective equipment(s) such as respirator. Contract with a disposal operator licensed by the Law on Disposal and Cleaning. Dispose of contents/container in accordance with local/regional/national/international regulations. |
| **Special precautions** | Not available. |

## 14. Transport information

**ADR**

Not regulated as dangerous goods.

**IATA**

Not regulated as dangerous goods.

**IMDG**

Not regulated as dangerous goods.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

This product is not intended to be transported in bulk.

## 15. Regulatory information

**Safety, health and environmental regulations specific for the product in question**

**Controlled Narcotic Drugs (Misuse of Drugs Act, First Schedule, Part I, II & III)**

Not regulated.

**Controlled Specified Drugs (Misuse of Drugs Act, Fourth Schedule)**

Not regulated.

**Prior Informed Consent (PIC) Substances (Environment Protection and Management Act, 2nd Schedule, Part 1, Jul. 1, 2013)**

Not regulated.

**Chemical Weapons Prohibition (Act)**

Not applicable.

**Environmental Protection and Management (Hazardous Substances) Regulations**

Not applicable.

**Environmental Public Health Act**

Not applicable.

**International regulations**

**Montreal Protocol**

Not applicable.

**Stockholm Convention**

Not applicable.

**Rotterdam Convention**

Not applicable.

**Kyoto protocol**

Not applicable.

**Basel Convention**

Not applicable.

**International Inventories**

| Country(s) or region | Inventory name | On inventory (yes/no)* |
|---|---|---|
| Australia | Australian Inventory of Chemical Substances (AICS) | Yes |
| Canada | Domestic Substances List (DSL) | Yes |
| Canada | Non-Domestic Substances List (NDSL) | No |
| China | Inventory of Existing Chemical Substances in China (IECSC) | Yes |
| Europe | European Inventory of Existing Commercial Chemical Substances (EINECS) | Yes |
| Europe | European List of Notified Chemical Substances (ELINCS) | No |
| Japan | Inventory of Existing and New Chemical Substances (ENCS) | Yes |
| Korea | Existing Chemicals List (ECL) | Yes |
| New Zealand | New Zealand Inventory | Yes |
| Philippines | Philippine Inventory of Chemicals and Chemical Substances (PICCS) | Yes |
| United States & Puerto Rico | Toxic Substances Control Act (TSCA) Inventory | Yes |

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)
A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

## 16. Other information

**References**

HSDB® - Hazardous Substances Data Bank
IARC Monographs. Overall Evaluation of Carcinogenicity
National Toxicology Program (NTP) Report on Carcinogens
ACGIH Documentation of the Threshold Limit Values and Biological Exposure Indices
NLM: Hazardous Substances Data Base
European Chemicals Agency's dissemination website for registered substances
SS 586: Specification for hazard communication for hazardous chemicals and dangerous goods. - Part 3: Preparation of safety data sheets (SDS)
Part 3 of Annex VI to Regulation (EC) No. 1272/2008
Chemical Risk Information Platform (CHRIP) provided by National Institute of Technology and Evaluation
C&L Inventory maintained by European Chemicals Agency

**Disclaimer**

A number of potentially serious health effects can result from aerosol inhalation of this product. Take preventive measures such as controlling size of generated particle, ventilation, and respiratory protection when using this product in spray application. Please contact nearby sales representative for further information. This information is offered in good faith as typical values and not as a product specification. No warranty, expressed or implied, is hereby made. The recommended industrial hygiene and safe handling procedures are believed to be generally applicable. However, each user should review these recommendations in the specific context of the intended use and determine whether they are appropriate.
This product has been designed, manufactured and developed solely for general industrial use only. This product is not designed for, intended for use as, or suitable for, medical, surgical or other particular purposes. Users have the sole responsibility and obligation to determine the suitability of this product for any application, to make preliminary tests, and to confirm the safety of this product for their use. Users must never use this product for the purpose of implantation into the human body and/or injection into humans.

**Issue date**

08-02-2017

**Revision date**

09-27-2021

**Key/legend**

Not applicable.

**Revision information**

Composition / Information on Ingredients: Disclosure Overrides
Physical & Chemical Properties: Multiple Properties
Toxicological Information: Toxicological Data
Other information: References
GHS: Classification