

SILCOOL™ TIS420C

SAFETY DATA SHEET

1. Identification of the hazardous chemical and of the supplier

Product identifier: SILCOOL™ TIS420C

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

Contact person : commercial.services@momentive.com

Telephone : +66-3899 7899

Telefax : +66-3899 7888

Emergency telephone number : 001 800 120 666 751 / +65 3158 1074

Responsible Department : Product Stewardship & Compliance

2. Hazard(s) identification

GHS classification of substance or mixture, and national or regional information :
Not classified

GHS label elements

Hazard symbol(s): No symbol

Signal Word: No signal word.

Hazard Statement(s): Not applicable

Precautionary statement(s): Not applicable

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

SILCOOL™ TIS420C

Mixtures

Chemical Identity	CAS number	Content in percent (%)*
Aluminum oxide	1344-28-1	>60%
Carbon Black	1333-86-4	<1%
Vinylmethyldimethoxysilane	16753-62-1	<1%

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

(1) The respirable particle(s) listed above are inextricably bound within the polymer matrix, and therefore does not present an inhalation hazard during normal use of this product. Tooling or machining of the cured product (sanding, cutting, milling) may release hazardous, respirable substances.

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

- 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.

SILCOOL™ TIS420C

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. See Section 8 of the SDS for Personal Protective Equipment. Keep unprotected persons away. Provide adequate ventilation.

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.

SILCOOL™ TIS420C

8. Exposure controls/personal protection

Control Parameters

Occupational Exposure Limits

Chemical Identity	Type	Exposure Limit Values	Source
Aluminum oxide	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
Carbon Black	Time Weighted Average (TWA):	3.5 mg/m3	Malaysia. OELs. (Occupational Safety and Health (Use and Standards of Exposure of Chemicals Hazardous to Health) Regulations), as amended 03 2000
	Time Weighted Average (TWA):	3.5 mg/m3	Malaysia. OELs. (Occupational Safety and Health (Use and Standards of Exposure of Chemicals Hazardous to Health) Regulations), as amended 03 2000
(1) Aluminum oxide - Inhalable particles.	TWA	10 mg/m3	US. ACGIH Threshold Limit Values, as amended (01 2021)
(1) Aluminum oxide - Respirable particles.	TWA	3 mg/m3	US. ACGIH Threshold Limit Values, as amended (01 2021)
(1) Aluminum oxide - Respirable fraction.	TWA	1 mg/m3	US. ACGIH Threshold Limit Values, as amended (2009)
(1) Carbon Black - Inhalable fraction.	TWA	3 mg/m3	US. ACGIH Threshold Limit Values, as amended (03 2015)
	TWA	3 mg/m3	US. ACGIH Threshold Limit Values, as amended (12 2010)

This product contains one or more substances with an occupational exposure limit. However, the respirable particle(s) of this/these substance(s) are inextricably bound within the polymer matrix. Therefore, we do not expect an exposure to this/these substance(s) during normal use of this product. Tooling or machining of the cured product (sanding, cutting, milling) may release hazardous, respirable substances.

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

SILCOOL™ TIS420C

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:** solid
- Form:** Paste
- Color:** Gray
- Odor:** Characteristic
- Odor threshold:** No data available.
- pH:** No data available.
- Melting point/freezing point:** No data available.
- Initial boiling point and boiling range:** No data available.
- Flash Point:** 350 °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:** No data available.
- Vapor density:** No data available.
- Density:** 3.20 g/cm³ (23 °C)
- Relative density:** No data available.
- Solubility(ies)**
- Solubility in water:** No data available.
- Solubility (other):** No data available.
- 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:** 300,000 mPa·s (23 °C)
- Viscosity, kinematic:** No data available.

10. Stability and reactivity

- Reactivity:** No dangerous reaction if used as recommended.

SILCOOL™ TIS420C

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 SDS for formaldehyde is available from Momentive.

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.

Dermal Product: No data available.

Inhalation

SILCOOL™ TIS420C

Product: No data available.

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.

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: No data available.

12. Ecological information

Ecotoxicity

Acute hazards to the aquatic environment

Fish

Product: No data available.

Aquatic Invertebrates

SILCOOL™ TIS420C

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

Aluminum oxide No data available.

Carbon Black No data available.

Vinylmethyldimethoxysilane No data available.

Other adverse effects: No data available.

13. Disposal information

Disposal methods

Disposal instructions: No data available.

Contaminated Packaging: Dispose of as unused product.

14. Transport information

ADR

SILCOOL™ TIS420C

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

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

QUARTZ

Silica

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 2017, 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

SILCOOL™ TIS420C

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

Not applicable

Kyoto protocol

Not applicable

Inventory Status:

REACH:	If purchased from Momentive Performance Materials GmbH in Leverkusen, Germany, all substances in this product have been registered by Momentive Performance Materials GmbH or upstream in our supply chain or are exempt from registration under Regulation (EC) No 1907/2006 (REACH). For polymers, this includes the constituent monomers and other reactants.	Remarks: None.
Australia AICS:	Not in compliance with the inventory.	Remarks: None.
Canada DSL Inventory List:	Q (quantity restricted)	Remarks: None.
Canada NDSL Inventory:	Not in compliance with the inventory.	Remarks: None.
China Inv. Existing Chemical Substances:	(Quantity restricted)	Remarks: Please contact your supplier for further information on the inventory status of this material.
Japan (ENCS) List:	Not in compliance with the inventory.	Remarks: None.
Korea Existing Chemicals Inv. (KECI):	(Quantity restricted)	Remarks: (Quantity restricted)
New Zealand Inventory of Chemicals:	Not in compliance with the inventory.	Remarks: None.
Philippines PICCS:	Not in compliance with the inventory.	Remarks: None.
Taiwan Chemical Substance Inventory:	On or in compliance with the inventory	Remarks: None.
US TSCA Inventory:	Q (quantity restricted)	Remarks: None.

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

Issue Date: 2023/12/20

SDS_MY

SILCOOL™ TIS420C

Revision Date: No data available.No data available.

Version #: 1.1

Source of information: No data available.

Further Information: No data available.

Disclaimer:

Notice to reader

Unless otherwise specified in section 1, Momentive products are intended for use in the manufacture and/or formulation of products and are not intended for direct consumer use. These products are not intended for long-lasting (> 30 days) implantation, injection or direct ingestion into the human body, nor for use in the manufacture of multiple use 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.

® and TM indicate trademarks owned by or licensed to Momentive.