# SAFETY DATA SHEET
**DOW SILICONES CORPORATION**

**Product name: DOWSIL™ TC-5622 Thermally Conductive Compound**

**Issue Date:** 10/30/2019

**Print Date:** 10/31/2019

DOW SILICONES CORPORATION encourages and expects you to read and understand the entire (M)SDS, as there is important information throughout the document. We expect you to follow the precautions identified in this document unless your use conditions would necessitate other appropriate methods or actions.

## 1. IDENTIFICATION

**Product name:** DOWSIL™ TC-5622 Thermally Conductive Compound

**Recommended use of the chemical and restrictions on use**
**Identified uses:** Electrical industry and electronics

**COMPANY IDENTIFICATION**
DOW SILICONES CORPORATION
2200 WEST SALZBURG ROAD
MIDLAND MI 48686-0994
UNITED STATES

**Customer Information Number:** 800-258-2436
SDSQuestion@dow.com

**EMERGENCY TELEPHONE NUMBER**
**24-Hour Emergency Contact:** 1 800 424 9300
**Local Emergency Contact:** 800-424-9300

## 2. HAZARDS IDENTIFICATION

**Hazard classification**
GHS classification in accordance with 29 CFR 1910.1200
Not a hazardous substance or mixture.

**Other hazards**
No data available

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

**Chemical nature:** Silicone compound
This product is a mixture.

| Component | CASRN | Concentration |
|---|---|---|

| | | |
|---|---|---|
| Siloxane modified Aluminum | Not available | >= 73.0 - <= 86.0 % |
| Siloxane modified Zinc Oxide | Not available | >= 12.0 - <= 22.0 % |

## 4. FIRST AID MEASURES

**Description of first aid measures**
**General advice:**
If potential for exposure exists refer to Section 8 for specific personal protective equipment.

**Inhalation:** Move person to fresh air; if effects occur, consult a physician.

**Skin contact:** Wash off with plenty of water.

**Eye contact:** Flush eyes thoroughly with water for several minutes. Remove contact lenses after the initial 1-2 minutes and continue flushing for several additional minutes. If effects occur, consult a physician, preferably an ophthalmologist.

**Ingestion:** No emergency medical treatment necessary.

**Most important symptoms and effects, both acute and delayed:**
Aside from the information found under Description of first aid measures (above) and Indication of immediate medical attention and special treatment needed (below), any additional important symptoms and effects are described in Section 11: Toxicology Information.

**Indication of any immediate medical attention and special treatment needed**
**Notes to physician:** No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

## 5. FIREFIGHTING MEASURES

**Extinguishing media**

**Suitable extinguishing media:** Water spray. Alcohol-resistant foam. Carbon dioxide (CO2). Dry chemical.

**Unsuitable extinguishing media:** None known..

**Special hazards arising from the substance or mixture**

**Hazardous combustion products:** Silicon oxides. Metal oxides. Carbon oxides. Formaldehyde.

**Unusual Fire and Explosion Hazards:** Exposure to combustion products may be a hazard to health..

**Advice for firefighters**

**Fire Fighting Procedures:** Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Use water spray to cool unopened

containers. Remove undamaged containers from fire area if it is safe to do so. Evacuate area.

**Special protective equipment for firefighters:** Wear self-contained breathing apparatus for firefighting if necessary.. Use personal protective equipment..

## 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures:** Follow safe handling advice and personal protective equipment recommendations.

**Environmental precautions:** Discharge into the environment must be avoided. Prevent further leakage or spillage if safe to do so. Retain and dispose of contaminated wash water. Local authorities should be advised if significant spillages cannot be contained.

**Methods and materials for containment and cleaning up:** Wipe up or scrape up and contain for salvage or disposal. Local or national regulations may apply to releases and disposal of this material, as well as those materials and items employed in the cleanup of releases. You will need to determine which regulations are applicable. For large spills, provide dyking or other appropriate containment to keep material from spreading. If dyked material can be pumped, Sections 13 and 15 of this SDS provide information regarding certain local or national requirements.
See sections: 7, 8, 11, 12 and 13.

## 7. HANDLING AND STORAGE

**Precautions for safe handling:** Take care to prevent spills, waste and minimize release to the environment. Handle in accordance with good industrial hygiene and safety practice.
Use only with adequate ventilation. See Engineering measures under EXPOSURE CONTROLS/PERSONAL PROTECTION section.

**Conditions for safe storage:** Keep in properly labelled containers. Store in accordance with the particular national regulations.

Do not store with the following product types: Strong oxidizing agents.
Unsuitable materials for containers**:** None known.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Control parameters**
If exposure limits exist, they are listed below. If no exposure limits are displayed, then no values are applicable.

| Component | Regulation | Type of listing | Value |
|---|---|---|---|
| Siloxane modified Aluminum | OSHA Z-1 | TWA total dust | 15 mg/m3 , Aluminium |
| | OSHA Z-1 | TWA respirable fraction | 5 mg/m3 , Aluminium |
| | ACGIH | TWA Respirable fraction | 1 mg/m3 , Aluminium |
| | Further information: LRT irr: Lower Respiratory Tract irritation; pneumoconiosis: Pneumoconiosis; neurotoxicity: Neurotoxicity; A4: Not classifiable as a human | | |

| | | | |
|---|---|---|---|
| | carcinogen; varies: varies | | |
| | OSHA P0 | TWA Fumes | 5 mg/m3 |
| | Further information: *: As determined from breathing-zone air samples. | | |
| Siloxane modified Zinc Oxide | ACGIH | TWA Respirable fraction | 2 mg/m3 |
| | Further information: metal fume fever: metal fume fever | | |
| | ACGIH | STEL Respirable fraction | 10 mg/m3 |
| | Further information: metal fume fever: metal fume fever | | |
| | OSHA Z-1 | TWA total dust | 15 mg/m3 |
| | OSHA Z-1 | TWA respirable fraction | 5 mg/m3 |
| | OSHA P0 | TWA Total | 10 mg/m3 |
| | OSHA P0 | TWA Respirable fraction | 5 mg/m3 |
| | OSHA Z-1 | TWA | 5 mg/m3 |
| | OSHA P0 | TWA | 5 mg/m3 |
| | OSHA P0 | STEL | 10 mg/m3 |
| | OSHA Z-1 | TWA Fumes | 5 mg/m3 |
| | OSHA P0 | TWA Total dust | 10 mg/m3 |
| | OSHA P0 | TWA respirable dust fraction | 5 mg/m3 |
| | OSHA P0 | TWA Fumes | 5 mg/m3 |
| | OSHA P0 | STEL Fumes | 10 mg/m3 |

**Exposure controls**

**Engineering controls:** Use local exhaust ventilation, or other engineering controls to maintain airborne levels below exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, general ventilation should be sufficient for most operations. Local exhaust ventilation may be necessary for some operations.

**Individual protection measures**

**Eye/face protection:** Use safety glasses (with side shields).

**Skin protection**

**Hand protection:** Use gloves chemically resistant to this material when prolonged or frequently repeated contact could occur. Examples of preferred glove barrier materials include: Butyl rubber. Neoprene. Nitrile/butadiene rubber ("nitrile" or "NBR"). Ethyl vinyl alcohol laminate ("EVAL"). Polyvinyl alcohol ("PVA"). Polyvinyl chloride ("PVC" or "vinyl"). Viton. Examples of acceptable glove barrier materials include: Natural rubber ("latex"). NOTICE: The selection of a specific glove for a particular application and duration of use in a workplace should also take into account all relevant workplace factors such as, but not limited to: Other chemicals which may be handled, physical requirements (cut/puncture protection, dexterity, thermal protection), potential body reactions to glove materials, as well as the instructions/specifications provided by the glove supplier.

**Other protection:** Wear clean, body-covering clothing.

**Respiratory protection:** Respiratory protection should be worn when there is a potential to exceed the exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, wear respiratory protection when adverse effects, such as respiratory irritation or discomfort have been experienced, or where indicated by your risk assessment process. For most conditions no respiratory protection should be needed; however, if discomfort is experienced, use an approved air-purifying respirator.

The following should be effective types of air-purifying respirators: Organic vapor cartridge with a particulate pre-filter.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

| | |
|---|---|
| **Appearance** | |
| **Physical state** | Grease |
| **Color** | grey |
| **Odor** | none |
| **Odor Threshold** | No data available |
| **pH** | Not applicable |
| **Melting point/range** | No data available |
| **Freezing point** | No data available |
| **Boiling point (760 mmHg)** | Not applicable |
| **Flash point** | **Seta closed cup** 265 °C ( 509 °F) |
| **Evaporation Rate (Butyl Acetate = 1)** | Not applicable |
| **Flammability (solid, gas)** | Not classified as a flammability hazard |
| **Lower explosion limit** | No data available |
| **Upper explosion limit** | No data available |
| **Vapor Pressure** | Not applicable |
| **Relative Vapor Density (air = 1)** | No data available |
| **Relative Density (water = 1)** | 2.55 |
| **Water solubility** | No data available |
| **Partition coefficient: n-octanol/water** | No data available |
| **Auto-ignition temperature** | No data available |
| **Decomposition temperature** | No data available |
| **Dynamic Viscosity** | Not applicable |
| **Kinematic Viscosity** | Not applicable |
| **Explosive properties** | Not explosive |
| **Oxidizing properties** | The substance or mixture is not classified as oxidizing. |
| **Molecular weight** | No data available |
| **Particle size** | No data available |

NOTE: The physical data presented above are typical values and should not be construed as a specification.

## 10. STABILITY AND REACTIVITY

**Reactivity:** Not classified as a reactivity hazard.

**Chemical stability:** Stable under normal conditions.

**Possibility of hazardous reactions:** Can react with strong oxidizing agents.

**Conditions to avoid:** None known.

**Incompatible materials:** Oxidizing agents

**Hazardous decomposition products:**
Decomposition products can include and are not limited to: Benzene. Formaldehyde.

## 11. TOXICOLOGICAL INFORMATION

*Toxicological information appears in this section when such data is available.*

**Information on likely routes of exposure**
Eye contact, Skin contact, Ingestion.

**Acute toxicity (represents short term exposures with immediate effects - no chronic/delayed effects known unless otherwise noted)**

**Acute oral toxicity**
Very low toxicity if swallowed. Harmful effects not anticipated from swallowing small amounts.

As product: Single dose oral LD50 has not been determined.

Based on information for component(s):
LD50, > 5,000 mg/kg Estimated.

**Information for components:**

**Siloxane modified Aluminum**
Single dose oral LD50 has not been determined.

**Siloxane modified Zinc Oxide**
For similar material(s): LD50, Rat, > 5,000 mg/kg

**Acute dermal toxicity**
Prolonged skin contact is unlikely to result in absorption of harmful amounts.

As product: The dermal LD50 has not been determined.

Based on information for component(s):
LD50, > 2,000 mg/kg Estimated.

**Information for components:**

**Siloxane modified Aluminum**
The dermal LD50 has not been determined.

**Siloxane modified Zinc Oxide**
The dermal LD50 has not been determined.

**Acute inhalation toxicity**
At room temperature, exposure to vapor is minimal due to low volatility; single exposure is not likely to be hazardous.

As product: The LC50 has not been determined.

**Information for components:**

**Siloxane modified Aluminum**
LC50, Rat, male, 4 Hour, dust/mist, > 0.888 mg/l OECD Test Guideline 403 No deaths occurred at this concentration.

**Siloxane modified Zinc Oxide**
For similar material(s): LC50, Rat, 4 Hour, dust/mist, > 5 mg/l No deaths occurred at this concentration.

**Skin corrosion/irritation**
Based on information for component(s):
Brief contact is essentially nonirritating to skin.
Prolonged contact may cause slight skin irritation with local redness.

**Information for components:**

**Siloxane modified Aluminum**
Brief contact is essentially nonirritating to skin.
Prolonged contact may cause skin irritation with local redness.

**Siloxane modified Zinc Oxide**
Prolonged contact is essentially nonirritating to skin.

**Serious eye damage/eye irritation**
Based on information for component(s):
May cause slight temporary eye irritation.
Corneal injury is unlikely.

**Information for components:**

**Siloxane modified Aluminum**
Fumes generated by welding, burning or melting may cause eye irritation.
Dust may irritate eyes.

**Siloxane modified Zinc Oxide**
May cause slight temporary eye irritation.
Corneal injury is unlikely.

**Sensitization**
For skin sensitization:
Contains component(s) which did not cause allergic skin sensitization in guinea pigs.

For respiratory sensitization:
No relevant data found.

**Information for components:**

**Siloxane modified Aluminum**
For similar material(s):
Did not cause allergic skin reactions when tested in guinea pigs.

For respiratory sensitization:
No relevant data found.

**Siloxane modified Zinc Oxide**
For skin sensitization:
No relevant data found.

For respiratory sensitization:
No relevant data found.

**Specific Target Organ Systemic Toxicity (Single Exposure)**
Evaluation of available data suggests that this material is not an STOT-SE toxicant.

**Information for components:**

**Siloxane modified Aluminum**
Available data are inadequate to determine single exposure specific target organ toxicity.

**Siloxane modified Zinc Oxide**
Available data are inadequate to determine single exposure specific target organ toxicity.

**Aspiration Hazard**
Based on physical properties, not likely to be an aspiration hazard.

**Information for components:**

**Siloxane modified Aluminum**
Based on physical properties, not likely to be an aspiration hazard.

**Siloxane modified Zinc Oxide**
Based on physical properties, not likely to be an aspiration hazard.

**Chronic toxicity (represents longer term exposures with repeated dose resulting in chronic/delayed effects - no immediate effects known unless otherwise noted)**

**Specific Target Organ Systemic Toxicity (Repeated Exposure)**
Contains component(s) which have been reported to cause effects on the following organs in humans:
Respiratory tract.

**Information for components:**

**Siloxane modified Aluminum**
Based on available data, repeated exposures are not anticipated to cause significant adverse effects.

**Siloxane modified Zinc Oxide**
For similar material(s):

In animals, effects have been reported on the following organs:
Lung.
In humans, effects have been reported on the following organs:
Respiratory tract.

**Carcinogenicity**
No relevant data found.

**Information for components:**

**Siloxane modified Aluminum**
Available data are inadequate to evaluate carcinogenicity.

**Siloxane modified Zinc Oxide**
Available data are inadequate to evaluate carcinogenicity.

**Teratogenicity**
High doses of aluminium and aluminium salts given to laboratory animals during pregnancy have caused developmental toxicity in the fetus at doses mildly toxic to the mother.

**Information for components:**

**Siloxane modified Aluminum**
High doses of aluminium and aluminium salts given to laboratory animals during pregnancy have caused developmental toxicity in the fetus at doses mildly toxic to the mother.

**Siloxane modified Zinc Oxide**
No relevant data found.

**Reproductive toxicity**
Contains component(s) which did not interfere with reproduction in animal studies.

**Information for components:**

**Siloxane modified Aluminum**
No relevant data found.

**Siloxane modified Zinc Oxide**
For similar material(s): In animal studies, did not interfere with reproduction. In animal studies, did not interfere with fertility.

**Mutagenicity**
Contains component(s) which were negative in some in vitro genetic toxicity studies and positive in others. Contains component(s) which were positive in animal genetic toxicity studies.

**Information for components:**

**Siloxane modified Aluminum**
In vitro genetic toxicity studies were predominantly negative. Animal genetic toxicity studies were positive.

**Siloxane modified Zinc Oxide**

For similar material(s): In vitro genetic toxicity studies were negative in some cases and positive in other cases.

## 12. ECOLOGICAL INFORMATION

*Ecotoxicological information appears in this section when such data is available.*

**Toxicity**

**Siloxane modified Aluminum**

**Acute toxicity to fish**
Material is practically non-toxic to aquatic organisms on an acute basis (LC50/EC50/EL50/LL50 >100 mg/L in the most sensitive species tested).
For similar material(s):
NOEC sublethal, Fish, semi-static test, 96 Hour, > 100 mg/l, OECD Test Guideline 203 or Equivalent
For similar material(s):
LC50, Fish, semi-static test, 96 Hour, > 100 mg/l, OECD Test Guideline 203 or Equivalent

**Acute toxicity to aquatic invertebrates**
For similar material(s):
EC50, Daphnia magna (Water flea), static test, 48 Hour, > 100 mg/l, OECD Test Guideline 202 or Equivalent

**Acute toxicity to algae/aquatic plants**
For similar material(s):
ErC50, Pseudokirchneriella subcapitata (green algae), static test, 72 Hour, Growth rate inhibition, > 100 mg/l, OECD Test Guideline 201 or Equivalent

**Chronic toxicity to fish**
Based on data from similar materials
NOEC, Pimephales promelas (fathead minnow), 28 d, 7.1 mg/l

**Chronic toxicity to aquatic invertebrates**
Based on data from similar materials
NOEC, Daphnia magna (Water flea), 28 d, 1.89 mg/l

**Siloxane modified Zinc Oxide**

**Acute toxicity to aquatic invertebrates**
Material is practically non-toxic to aquatic organisms on an acute basis (LC50/EC50/EL50/LL50 >100 mg/L in the most sensitive species tested).
For similar material(s):
EC50, Daphnia magna (Water flea), 48 Hour, > 100 mg/l

**Persistence and degradability**

**Siloxane modified Aluminum**
**Biodegradability:** Biodegradability is not applicable to inorganic substances.

**Siloxane modified Zinc Oxide**
**Biodegradability:** Biodegradability is not applicable to inorganic substances.

**Bioaccumulative potential**

**Siloxane modified Aluminum**
**Bioaccumulation:** Partitioning from water to n-octanol is not applicable.

**Siloxane modified Zinc Oxide**
**Bioaccumulation:** Partitioning from water to n-octanol is not applicable.

**Mobility in soil**

**Siloxane modified Aluminum**
No relevant data found.

**Siloxane modified Zinc Oxide**
No relevant data found.

## 13. DISPOSAL CONSIDERATIONS

**Disposal methods:** DO NOT DUMP INTO ANY SEWERS, ON THE GROUND, OR INTO ANY BODY OF WATER. All disposal practices must be in compliance with all Federal, State/Provincial and local laws and regulations. Regulations may vary in different locations. Waste characterizations and compliance with applicable laws are the responsibility solely of the waste generator. AS YOUR SUPPLIER, WE HAVE NO CONTROL OVER THE MANAGEMENT PRACTICES OR MANUFACTURING PROCESSES OF PARTIES HANDLING OR USING THIS MATERIAL. THE INFORMATION PRESENTED HERE PERTAINS ONLY TO THE PRODUCT AS SHIPPED IN ITS INTENDED CONDITION AS DESCRIBED IN MSDS SECTION: Composition Information. FOR UNUSED & UNCONTAMINATED PRODUCT, the preferred options include sending to a licensed, permitted: Incinerator or other thermal destruction device. For additional information, refer to: Handling & Storage Information, MSDS Section 7 Stability & Reactivity Information, MSDS Section10 Regulatory Information, MSDS Section 15

**Treatment and disposal methods of used packaging:** Empty containers should be recycled or otherwise disposed of by an approved waste management facility. Waste characterizations and compliance with applicable laws are the responsibility solely of the waste generator. Do not re-use containers for any purpose.

## 14. TRANSPORT INFORMATION

**DOT**

Not regulated for transport

**Classification for SEA transport (IMO-IMDG):**

Not regulated for transport

| | |
|---|---|
| **Transport in bulk according to Annex I or II of MARPOL 73/78 and the IBC or IGC Code** | Consult IMO regulations before transporting ocean bulk |

**Classification for AIR transport (IATA/ICAO):**

Not regulated for transport

This information is not intended to convey all specific regulatory or operational requirements/information relating to this product. Transportation classifications may vary by container volume and may be influenced by regional or country variations in regulations. Additional transportation system information can be obtained through an authorized sales or customer service representative. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material.

## 15. REGULATORY INFORMATION

**Superfund Amendments and Reauthorization Act of 1986 Title III (Emergency Planning and Community Right-to-Know Act of 1986) Sections 311 and 312**

No SARA Hazards

**Superfund Amendments and Reauthorization Act of 1986 Title III (Emergency Planning and Community Right-to-Know Act of 1986) Section 313**

The following components are subject to reporting levels established by SARA Title III, Section 313:

| **Components** | **CASRN** |
|---|---|
| Siloxane modified Aluminum | Not available |
| Siloxane modified Zinc Oxide | Not available |

**Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) Section 103**

Calculated RQ exceeds reasonably attainable upper limit.

| **Components** | **CASRN** | **RQ (RCRA Code)** |
|---|---|---|
| Lead | 7439-92-1 | 10 lbs RQ |
| Lead | 7439-92-1 | 10 lbs RQ (D008) |
| Toluene | 108-88-3 | 1000 lbs RQ |
| Toluene | 108-88-3 | 100 lbs RQ (F005) |
| Methanol | 67-56-1 | 5000 lbs RQ |
| Methanol | 67-56-1 | 100 lbs RQ (F003) |
| Benzene | 71-43-2 | 10 lbs RQ (D018) |
| Benzene | 71-43-2 | 10 lbs RQ |
| Lead | 7439-92-1 | 10 lbs RQ |
| Lead | 7439-92-1 | 10 lbs RQ (D008) |

**Pennsylvania Right To Know**

The following chemicals are listed because of the additional requirements of Pennsylvania law:

| **Components** | **CASRN** |
|---|---|
| Siloxane modified Aluminum | Not available |
| Siloxane modified Zinc Oxide | Not available |
| Poly(dimethylsiloxane)copolymer | 63148-52-7 |

**California Prop. 65**

WARNING: This product can expose you to chemicals including Lead, Lead oxide, Cadmium oxide, Benzene, which is/are known to the State of California to cause cancer, and Lead, Toluene, Methanol, Benzene, which is/are known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

**United States TSCA Inventory (TSCA)**
All components of this product are in compliance with the inventory listing requirements of the U.S. Toxic Substances Control Act (TSCA) Chemical Substance Inventory.

## 16. OTHER INFORMATION

**Hazard Rating System**
**NFPA**

| Health | Flammability | Instability |
|---|---|---|
| 0 | 1 | 0 |

**HMIS**

| Health | Flammability | Physical Hazard |
|---|---|---|
| 0/ | 1 | 0 |

**Revision**
Identification Number: 4098289 / A713 / Issue Date: 10/30/2019 / Version: 6.0
Most recent revision(s) are noted by the bold, double bars in left-hand margin throughout this document.

**Legend**

| | |
|---|---|
| ACGIH | USA. ACGIH Threshold Limit Values (TLV) |
| OSHA P0 | USA. OSHA - TABLE Z-1 Limits for Air Contaminants - 1910.1000 |
| OSHA Z-1 | USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants |
| STEL | Short-term exposure limit |
| TWA | 8-hour, time-weighted average |

**Full text of other abbreviations**
AICS - Australian Inventory of Chemical Substances; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS - Extremely Hazardous Substance; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population

(Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ - Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

**Information Source and References**
This SDS is prepared by Product Regulatory Services and Hazard Communications Groups from information supplied by internal references within our company.

DOW SILICONES CORPORATION urges each customer or recipient of this (M)SDS to study it carefully and consult appropriate expertise, as necessary or appropriate, to become aware of and understand the data contained in this (M)SDS and any hazards associated with the product. The information herein is provided in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express or implied, is given. Regulatory requirements are subject to change and may differ between various locations. It is the buyer's/user's responsibility to ensure that his activities comply with all federal, state, provincial or local laws. The information presented here pertains only to the product as shipped. Since conditions for use of the product are not under the control of the manufacturer, it is the buyer's/user's duty to determine the conditions necessary for the safe use of this product. Due to the proliferation of sources for information such as manufacturer-specific (M)SDSs, we are not and cannot be responsible for (M)SDSs obtained from any source other than ourselves. If you have obtained an (M)SDS from another source or if you are not sure that the (M)SDS you have is current, please contact us for the most current version.
US