SAFETY DATA SHEET


1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY UNDERTAKING

IDENTIFICATION OF THE MIXTURE

TRADE/MATERIAL NAME:

SpecSeal® Series SIL Silicone Sealant

RELEVANT USE of the SUBSTANCE:

Firestop and Sound Transmission

USES ADVISED AGAINST:

None

SUPPLIER/MANUFACTURER’S NAME:

Specified Technologies, Inc.

Address: 210 Evans Way,
Somerville, New Jersey 08876

Business Phone: (908) 526-8000 (8:00am to 5:00pm Eastern Standard Time)

Emergency Phone: U.S., Canada: 1-800-255-3924 (24 hrs)

International: +1-813-248-0585 (collect-24 hrs)

EMAIL of Competent Person for Information on SDS: techserv@stifirestop.com

NOTE: ALL United States Occupational Safety and Health Administration Standard (29 CFR 1910.1200), U.S. State equivalent Standards, Canadian WHMIS [Controlled Products Regulations], Mexican NOM018-STPS 2000, SPRING Singapore, and Japanese JIS Z7250 required information is included in appropriate sections based on the U.S. ANSI Z400.1-2010 format. This product has been classified in accordance with the hazard criteria of the countries listed above.

This SDS contains only readily available information from original manufacture. Other hazards may be possible, but cannot be determined due to proprietary nature of formulation.

2. HAZARD IDENTIFICATION

GLOBAL HARMONIZATION AND JAPANESE JIS Z7253 LABELING AND CLASSIFICATION: This product has been classified per UN GHS Standards under U.S., Japanese and other applicable regulations that require Global Harmonization compliance.

Classification: Reproductive Toxicity Category 2, Aquatic Chronic Toxicity Category 4

Signal Word: Warning

Hazard Statements: H361fd: Suspected of damaging fertility. Suspected of damaging the unborn child. H413: May cause long-lasting harmful effects to aquatic life.

Precautionary Statements:


Response: P308 + P313: IF exposed or concerned: Get medical advice/attention. P321: Specific treatment (remove from exposure and treat symptoms).

Storage: P405: Store locked up.

Disposal: P501: Dispose of contents/containers in accordance with all local, regional, national and international regulations.

Hazard Symbols: GHS08

KOREAN ISHA (Notice 2009-68) LABELING AND CLASSIFICATION: Classified in accordance with ISHA Notice 2009-68. Under ISHA, no differences in classification are applicable.

3. COMPOSITION and INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS #</th>
<th>Chinese IECSC Inventory</th>
<th>Japanese ENCS #</th>
<th>Korean ECL Inventory #</th>
<th>Taiwan NESCI ECS Inventory</th>
<th>WT%</th>
<th>LABEL ELEMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Octamethylocyclo-tetrasiloxane</td>
<td>556-67-2</td>
<td>Listed</td>
<td>7-475</td>
<td>KE-26606</td>
<td>Listed</td>
<td>0.1-1.0%</td>
<td>PUBLISHED and SELF CLASSIFICATION GHS &amp; JAPANESE JIS Z7253 &amp; KOREAN ISHA: Classification; Flammable Liquid Cat. 3, Reproductive Toxicity Cat. 2, Acute Oral Toxicity Cat. 4, Acute Dermal Toxicity Cat. 4, Acute Inhalation Toxicity Cat. 4, Aquatic Chronic Toxicity Cat. 4, Hazard Codes: H226, H361fd, H302 + H312 + H332, H413</td>
</tr>
</tbody>
</table>

SPECSEAL® SERIES SIL SILICONE SEALANT SDS

PAGE 1 OF 9

EFFECTIVE DATE: JANUARY 3, 2017
4. FIRST-AID MEASURES

DESCRIPTION OF FIRST AID MEASURES: Contaminated individuals must be taken for medical attention if any adverse effects occur. Remove contaminated clothing and shoes. Take a copy of this SDS to health professional with victim. Wash clothing and thoroughly clean shoes before reuse. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Take a copy of label and SDS to physician or health professional with the contaminated individual.

Skin Exposure: If adverse skin effects occur, discontinue use and flush contaminated area.

Inhalation: If vapors are inhaled, remove victim to fresh air. Seek medical attention if adverse effect continues after removal to fresh air.

Eye Exposure: If this product contaminates the eyes, rinse eyes under gently running water. Use sufficient force to open eyelids and then “roll” eyes while flushing. Minimum flushing is for 20 minutes.

Ingestion: If this product is swallowed, CALL PHYSICIAN OR POISON CONTROL CENTER FOR MOST CURRENT INFORMATION. If professional advice is not available, DO NOT INDUCE VOMITING. Never induce vomiting or give diluents (milk or water) to someone who is unconscious, having convulsions, or unable to swallow.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: It is current not known if any pre-existing conditions may be aggravated by overexposures to this product.

5. FIRE-FIGHTING MEASURES

FLASH POINT (est.): 226 C (438 F)

AUTOIGNITION TEMPERATURE: Not available.

FLAMMABLE LIMITS (in air by volume, %): Not available.

FIRE EXTINGUISHING MEDIA: Use extinguishing materials suitable for the surrounding area.

UNSUITABLE FIRE EXTINGUISHING MEDIA: None known.

UNUSUAL FIRE AND EXPLOSION HAZARDS: This product is combustible and may ignite if highly heated for a prolonged period or if subjected to direct flame. When involved in a fire, this material may decompose and produce irritating vapors and toxic gases (e.g., carbon and silicon oxides, formic acid, formaldehyde and other unknown compounds).


Explosion Sensitivity to Static Discharge: Not sensitive.

SPECIAL PROTECTIVE ACTIONS FOR FIRE-FIGHTERS: No Special protective actions for fire-fighters are anticipated.

6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS AND EMERGENCY PROCEDURES: Uncontrolled releases should be responded to by trained personnel using pre-planned procedures. Proper protective equipment should be used. Call CHEMTREC (1-800-424-9300) for emergency assistance. Or if in Canada, call CANUTEC (613-996-6666).

PERSONAL PROTECTIVE EQUIPMENT: Proper protective equipment should be used.

Small Spills: Wear rubber gloves, splash goggles, and appropriate body protection.

Large Spills: Minimum Personal Protective Equipment should be rubber gloves, rubber boots, splash goggles, and protective clothing.

METHODS FOR CLEAN-UP AND CONTAINMENT: Spills of this product present minimal hazard.

Small Spills: Small releases can be carefully swept up or cleaned up using a damp sponge or poly pads.

Large Spills: Access to the spill area should be restricted. For large spills, cover with non-sparking vacuum.

All Spills: Place all spill residue in a double plastic bag or other containment and seal.. Rinse area with soap and water solution and follow with a water rinse. Decontaminate the area thoroughly. Do not mix with wastes from other materials. Dispose of in accordance with applicable Federal, State, and local procedures (see Section 13, Disposal Considerations). For spills on water, contain, minimize dispersion and collect. Dispose of recovered material and report spill per regulatory requirements.

ENVIRONMENTAL PRECAUTIONS: Avoid release to the environment. Run-off water may be contaminated by other materials and should be contained to prevent possible environmental damage.

7. HANDLING and USE

PRECAUTIONS FOR SAFE HANDLING: As with all chemicals, avoid getting this material ON YOU or IN YOU. Do not eat, drink, smoke, or apply cosmetics while handling this product. Wash hands thoroughly after handling this product or containers of this product. Avoid breathing fumes or vapors generated by this product. Use in a well-ventilated location.

CONDITIONS FOR SAFE STORAGE: Store containers in a cool, dry location, away from direct sunlight, sources of intense heat. The recommended storage temperature is < 27°C (< 80°F).

SPECIFIC END USE(S): This product is for use as a sealant. Follow all industry standards for use of this product.

PROTECTIVE PRACTICES DURING MAINTENANCE OF CONTAMINATED EQUIPMENT: Follow practices indicated in Section 6 (Accidental Release Measures). Make certain that application equipment is locked and tagged-out safely, if necessary. Collect all rinsates and dispose of according to applicable Federal, State, and local procedures.
8. EXPOSURE CONTROLS - PERSONAL PROTECTION

EXPOSURE LIMITS/CONTROL PARAMETERS:

Ventilation and Engineering Controls: Use with adequate ventilation to ensure exposure levels are maintained below the limits provided below (if applicable). Exhaust directly to the outside, taking necessary precautions for environmental protection.

Workplace Exposure Limits/Control Parameters:

<table>
<thead>
<tr>
<th>CHEMICAL NAME</th>
<th>CAS #</th>
<th>EXPOSURE LIMITS IN AIR</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ACGIH-TLVs</td>
<td>OSHA-PELs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>TWA mg/m³</td>
<td>STEL mg/m³</td>
<td>TWA mg/m³</td>
<td>STEL mg/m³</td>
<td>TWA mg/m³</td>
<td>STEL mg/m³</td>
<td>IDLH mg/m³</td>
</tr>
<tr>
<td>Octamethylcyclotrisiloxane</td>
<td>556-67-2</td>
<td>NE</td>
<td>NE</td>
<td>NE</td>
<td>NE</td>
<td>NE</td>
<td>MFG REL: 5 ppm</td>
</tr>
<tr>
<td>Proprietary Ingredient</td>
<td></td>
<td>No Available Information</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

NE = Not Established. See Section 16 for Definitions of Other Terms Used.


Respiratory Protection: Maintain airborne contaminant concentrations below exposure limits listed above, if applicable. For materials without listed exposure limits, minimize respiratory exposure.

Eye Protection: Wear safety glasses.

Hand Protection: During manufacture or other similar operations, wear the appropriate hand protection for the process. Use double gloves for spill response, as stated in Section 6 (Accidental Release Measures) of this SDS.

Skin Protection: Use appropriate protective clothing for the task.

9. PHYSICAL and CHEMICAL PROPERTIES

FORM: Paste.

MOLECULAR FORMULA: Mixture.

COLOR: Concrete (limestone).

ODOR: Sweet.

ODOR THRESHOLD: Not available.

FLAMMABLE LIMITS (in air by volume, %): Not available.

DECOMPOSITION TEMPERATURE: Not available.

AUTOIGNITION TEMPERATURE: Not available.

FREEZING/MELTING POINT: Not available.

VAPOR PRESSURE: Not available.

VOLATILE ORGANIC COMPOUNDS (w/w): < 1.9%; 20 g/L

EVAPORATION RATE (n-BuAc = 1): > 1

SOLUBILITY IN WATER: Insoluble.

COEFFICIENT WATER/OIL DISTRIBUTION: Not established.

VISCOSITY: Dynamic: Not available. Kinematic @ 40°C: > 20.5 mm²s

HOW TO DETECT THIS SUBSTANCE (warning properties in event of accidental release): The viscous appearance and sweet odor may be characteristics to distinguish a release of this product.

10. STABILITY and REACTIVITY

CHEMICAL STABILITY: This product is stable when properly stored at normal temperature and pressures (see Section 7, Handling and Storage). Contact with water causes this product to cure.

DECOMPOSITION PRODUCTS: Combustion: Formaldehyde, formic acid, carbon and silicon oxides and other unknown compounds. Hydrolysis: None known.

MATERIALS WITH WHICH SUBSTANCE IS INCOMPATIBLE: This product is incompatible with strong oxidizers.

POSSIBILITY OF HAZARDOUS POLYMERIZATION OR REACTION: Will not occur.

CONDITIONS TO AVOID: Avoid exposure to or contact with extreme temperatures and incompatible chemicals.
11. TOXICOLOGICAL INFORMATION

SYMPTOMS OF EXPOSURE BY ROUTE OF EXPOSURE: The health hazard information provided below is pertinent to employees using this product in an occupational setting. The following paragraphs describe the symptoms of exposure by route of exposure.

Inhalation: Inhalation of fumes or vapors may cause irritation of the nose, throat, lungs and cause coughing. Removal to fresh air should relieve symptoms.

Contact with Skin or Eyes: Direct eye contact may cause transient irritation, redness, and tearing from irritation. Prolonged or repeated skin exposures may cause dermatitis (dry red skin).

Skin Absorption: Components are not known to be absorbed through intact skin.

Ingestion: Ingestion is not a significant route of occupational exposure and is unlikely to occur.

Injection: Accidental injection of this product, via laceration or puncture by a contaminated object can cause redness at the site of injection.

HEALTH EFFECTS OR RISKS FROM EXPOSURE: Exposure to this product may cause the following health effects:

Acute: Inhalation of fumes or vapors may cause irritation of respiratory system. Eye contact may cause irritation.

Chronic: Prolonged or repeated skin exposure may cause dermatitis (dry red skin).

This product contains a trace compound that may have adverse effect on fertility, or the fetus, based on animal data.

TARGET ORGANS: Acute: Skin, eyes, respiratory system. Chronic: Skin.

TOXICITY DATA: Currently, the following toxicological data are available for known components of 1% or more concentration.

OCTAMETHYLCYCLOTETRASILOXANE:

Standard Draize Test (Skin-Rabbit) 500 mg/24 hours: Mild
Standard Draize Test (Eye-Rabbit) 500 mg/24 hours: Mild
LC50 (Inhalation-Rat) 38 gm/m3/4 hours: Behavioral: excitement; Lungs, Thorax, or Respiration: dyspnea Skin and Appendages: hair
LD50 (Oral-Rat) 1540 mg/kg: Behavioral: tremor
LD50 (Skin-Rabbit) 1770 mg/kg: Behavioral: tremor; Gastrointestinal: changes in structure or function of salivary glands; Liver: other changes
LD50 (Skin-Rabbit) 794 µL/kg: Kidney/Ureter/Bladder: hematuria

TCLo (Inhalation-Rat) 300 ppm/6 hours/13 weeks-intermittent: Liver: changes in liver weight
TCLo (Inhalation-Rat) 700 ppm/6 hours/4 weeks-intermittent: Liver: changes in liver weight; Nutritional and Gross Metabolic: weight loss or decreased weight gain; Biochemical: Enzyme inhibition, induction, or change in blood or tissue levels: cytochrome oxidases (including oxidative phosphorylation)

TCLo (Inhalation-Rat) 700 ppm/6 hours/4 weeks-intermittent: Liver: other changes, changes in liver weight; Endocrine: changes in thyroid weight
TCLo (Inhalation-Rat) 35 ppm/6 hours/91 days-intermittent: Blood: changes in serum composition (e.g. TP, bilirubin, cholesterol); Biochemical: Enzyme inhibition, induction, or change in blood or tissue levels; multiple enzyme effects
TCLo (Inhalation-Rat) 898 ppm/6 hours/91 days-intermittent: Lungs, Thorax, or Respiration: other changes; Biochemical: Enzyme inhibition, induction, or change in blood or tissue levels: multiple enzyme effects, Metabolism (Intermediate): lipids including transport

OCTAMETHYLCYCLOTETRASILOXANE (continued):

TCLo (Inhalation-Rat) 700 ppm/104 weeks-intermittent: Liver: changes in liver weight; Kidney/Ureter/Bladder: other changes, changes in kidney weight
TCLo (Inhalation-Rat) 488 ppm/6 hours/91 days-intermittent: Lungs, Thorax, or Respiration: other changes; Blood: normocytic anemia; Related to Chronic Data: changes in testicular weight
TCLo (Inhalation-Rat) 488 ppm/6 hours/91 days-intermittent: Liver: changes in liver weight; Kidney/Ureter/Bladder: changes in kidney weight; Endocrine: changes in thymus weight
TCLo (Inhalation-Rat) 898 ppm/6 hours/91 days-intermittent: Endocrine: changes in adrenal weight; Related to Chronic Data: death Related to Chronic Data: changes in ovarian weight
TCLo (Inhalation-Rat) 700 ppm/104 weeks-intermittent: Nutritional and Gross Metabolic: weight loss or decreased weight gain; Related to Chronic Data: death
TCLo (Inhalation-Rat) 700 ppm/52 weeks-intermittent: Liver: other changes
TCLo (Inhalation-Rat) 30 ppm/26 weeks-intermittent: Liver: changes in liver weight
TCLo (Inhalation-Rat) 150 ppm/104 weeks-intermittent: Kidney/Ureter/Bladder: other changes, changes in kidney weight
TCLo (Inhalation-Rat) 700 ppm/52 weeks-intermittent: Kidney/Ureter/Bladder: other changes, changes in kidney weight
TCLo (Inhalation-Rat) 700 ppm/104 weeks-intermittent: Reproductive: Maternal Effects: uterus, cervix, vagina; Tumorigenic effects: uterine tumors; Related to Chronic Data: changes in uterine weight
11. TOXICOLOGICAL INFORMATION (Continued)

TOXICITY DATA (continued):

OCTAMETHYLCYCLOTETRASILOXANE (continued):
TCLo (Inhalation-Rat) 700 ppm/52 weeks-intermittent: Sense Organs and Special Senses (Olfaction): effect, not otherwise specified; Skin and Appendages: primary irritation (after topical exposure)

TCLo (Inhalation-Rat) 700 ppm/13 weeks-intermittent: Blood: changes in other cell count (unspecified)

TCLo (Inhalation-Rat) 150 ppm/52 weeks-intermittent: Liver: changes in liver weight

TCLo (Inhalation-Rat) 700 ppm/3 days-intermittent: Endocrine: estrogenic; Related to Chronic Data: changes in uterine weight

TCLo (Inhalation-Rat) 700 ppm/6 hours/3 days-intermittent: Endocrine: changes in luteinizing hormone; Reproductive: Maternal Effects: oogenesis

TCLo (Inhalation-Rat) 700 ppm/35 days-intermittent: Endocrine: estrogenic; Reproductive: Maternal Effects: oogenesis, ovaries, fallopian tubes

TCLo (Inhalation-Rat) 700 ppm/16 hours/3 days-intermittent: Endocrine: estrogenic; Reproductive: Maternal Effects: uterus, cervix, vagina; Related to Chronic Data: changes in ovarian weight

TCLo (Inhalation-Rat) 698 ppm/47 days/intermittent: Endocrine: changes in adrenal weight; Nutritional and Gross Metabolic: weight loss or decreased weight gain

TCLo (Inhalation-Rat) 696 ppm/6 hours/intermittent: Nutritional and Gross Metabolic: weight loss or decreased weight gain

TCLo (Inhalation-Rat) 700 ppm/6 hours/3 days-intermittent: Nutritional and Gross Metabolic: weight loss or decreased weight gain

TCLo (Inhalation-Rat) 500 ppm/6 hours/16 weeks-intermittent: Related to Chronic Data: death

TCLo (Inhalation-Rat) 700 ppm/6 hours/54 days-intermittent: Behavioral: food intake (animal); Nutritional and Gross Metabolic: weight loss or decreased weight gain

TCLo (Inhalation-Rat) 700 ppm/6 hours/1 week-intermittent: Kidney/Urinary/Bladder: changes in kidney weight; Nutritional and Gross Metabolic: weight loss or decreased weight gain

TCLo (Inhalation-Rat) 300 ppm/6 hours/70 days-intermittent: Liver: changes in liver weight

TCLo (Inhalation-Rat) 700 ppm/6 hours/70 days-intermittent: Endocrine: changes in pituitary weight

TCLo (Inhalation-Rat) 500 ppm/6 hours/96 days-intermittent: Liver: changes in liver weight

TCLo (Inhalation-Rat) 700 ppm/6 hours/96 days-intermittent: Lungs, Thorax, or Respiration: other changes

TCLo (Inhalation-Rat) 696 ppm/6 days-intermittent: Related to Chronic Data: changes in ovarian weight

TCLo (Inhalation-Rat) 500 ppm: male 70 day(s) pre-mating female 70 day(s) pre-mating: 3 week(s) post-birth; Reproductive: Effects on Newborn: live birth index (measured after birth)

TCLo (Inhalation-Rat) 698 ppm: female 28 day(s) pre-mating 19 day(s) after conception: Reproductive: Effects on Embryo or Fetus: fetotoxicity (except death, e.g., stunted fetus)

TCLo (Inhalation-Rat) 301 ppm: female 28 day(s) pre-mating 19 day(s) after conception: Reproductive: Maternal Effects: oogenesis

TCLo (Inhalation-Rat) 700 ppm: multi-generations: Reproductive: Specific Developmental Abnormalities: respiratory system; Effects on Newborn: behavioral irritation

IRRITANCY OF PRODUCT: Inhalation of fumes or vapors may cause respiratory irritation. Eye contact may cause irritation. Prolonged skin contact may cause irritation.

SENSITIZATION OF PRODUCT: This product is not currently known to cause allergic skin or respiratory reaction.

CARCINOGENIC POTENTIAL OF COMPONENTS: The known components are not found on the following lists: U.S. EPA, U.S. NTP, U.S. OSHA, U.S. NIOSH, GERMAN MAK, IARC, or ACGIH and therefore is neither considered to be nor suspected to be a cancer-causing agent by these agencies.

REPRODUCTIVE TOXICITY INFORMATION: The known components have no mutagenic potential. The following information is available for the Octamethylcyclotetrasiloxane component.

Embryotoxic/Teratogenicity: In animal studies, Octamethylcyclotetrasiloxane has shown adverse effects on embryo or fetus, including fetotoxicity, reduced weight gain, stunted fetus, fetal death, specific developmental abnormalities to urogenital, hepatobiliary and respiratory systems.

Reproductive Toxicity: In animal studies, Octamethylcyclotetrasiloxane has shown adverse effects on fertility, including pre-implantation mortality (e.g. reduction in number of implants per female; total number of implants per corpora lutea), oogenesis in females, on morphology of ovaries, fallopian tubes, and paternal effects including spermatogenesis (incl. genetic material, sperm morphology, motility, and count)

ACGIH BIOLOGICAL EXPOSURE INDICES (BEIs): Currently, there are no ACGIH Biological Exposure Indices (BEIs) determined for this material.

DEGREE OF EFFECT TO THE HEALTH OF THE POLLUTING AGENT OF ENVIRONMENT OF WORK (per Mexican NOM-010 STPS-1999): 0

12. ECOLOGICAL INFORMATION

ALL WORK PRACTICES MUST BE AIMED AT ELIMINATING ENVIRONMENTAL CONTAMINATION.

MOBILITY: This product has not been tested for mobility in soil.

PERSISTENCE AND BIODEGRADABILITY: This product has not been tested for persistence or biodegradability. The mineral components are not expected to biodegrade to great extent.

BIO-ACCUMULATION POTENTIAL: This product has not been tested for bio-accumulation potential. The Octamethylcyclotetrasiloxane component has a high bioconcentration potential; information is available as follows.

OCTAMETHYLCYCLOTETRASILOXANE: The Koc of Octamethylcyclotetrasiloxane is estimated as 14,000, using a log Kow of 5 and a regression-derived equation. According to a classification scheme, this estimated Koc value suggests that Octamethylcyclotetrasiloxane is expected to be immobile in soil.
12. ECOLOGICAL INFORMATION (Continued)

ECOTOXICITY: This product has not been tested for aquatic or animal toxicity. All releases to terrestrial, atmospheric and aquatic environments should be avoided. The following are aquatic toxicity data for the Octamethylcyclotetrasiloxane.

**OCTAMETHYLCYCLOTETRASILoxane:**
- **LC50 (Oncorhyncus mykiss Rainbow trout) 14 days = 10 µg/L (95% confidence limit: 8.5-13 µg/L; flow through**
- **LC50 (Lepomis macrochirius Bluegill) 96 hours = > 1000 mg/L (Conditions of bioassay not specified in source examined)**

**OTHER ADVERSE EFFECTS:** This material is not listed as having ozone depletion potential.

ENVIRONMENTAL EXPOSURE CONTROLS: Controls should be engineered to prevent release to the environment, including procedures to prevent spills, atmospheric release and release to waterways.

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHODS: It is the responsibility of the generator to determine at the time of disposal whether the product meets the criteria of a hazardous waste per regulations of the area in which the waste is generated and/or disposed of. Waste disposal must be in accordance with appropriate Federal, State, and local regulations. This product, if unaltered by use, may be disposed of by treatment at a permitted facility or as advised by your local hazardous waste regulatory authority. Shipment of wastes must be done with appropriately permitted and registered transporters.

DISPOSAL CONTAINERS: Waste materials must be placed in and shipped in appropriate 5-gallon or 55-gallon poly or metal waste pails or drums. Permeable cardboard containers are not appropriate and should not be used. Ensure that any required marking or labeling of the containers be done to all applicable regulations.

PRECAUTIONS TO BE FOLLOWED DURING WASTE HANDLING: Wear proper protective equipment when handling waste materials.

U.S. EPA WASTE NUMBER: Not applicable.

14. TRANSPORTATION INFORMATION

U.S. DEPARTMENT OF TRANSPORTATION REGULATIONS: This product is not classified as dangerous goods, per U.S. DOT regulations, under 49 CFR 172.101.

TRANSPORT CANADA TRANSPORTATION OF DANGEROUS GOODS REGULATIONS: This product is not classified as Dangerous Goods, per regulations of Transport Canada.

INTERNATIONAL AIR TRANSPORT ASSOCIATION (IATA): This product is not classified as dangerous goods under rules of IATA.

INTERNATIONAL MARITIME ORGANIZATION (IMO) DESIGNATION: This product is not classified as Dangerous Goods by the International Maritime Organization.

OFFICIAL MEXICAN STANDARD; REGULATION FOR THE TRANSPORT OF DANGEROUS GOODS AND RESIDUES: This product is not classified as Dangerous Goods, per transport regulations of Mexico.

SINGAPORE STANDARD 286: PART A: This product has no requirements under the Specification for Caution Labeling for Hazardous Substances, Part 4: Marking of Packages, Containers and Vehicles, as it does not meet the criteria for any hazard class under this regulation.

TRANSPORT IN BULK ACCORDING TO THE IBC CODE: See the information under the individual jurisdiction listings for IBC information.

ENVIRONMENTAL HAZARDS: This material does not meet the criteria of environmentally hazardous according to the criteria of the UN Model Regulations (as reflected in the IMDG Code, ADR, RID, and ADN) and is not listed in Annex III under MARPOL 73/78.

15. REGULATORY INFORMATION

UNITED STATES REGULATIONS:
- **U.S. SARA Reporting Requirements:** The Octamethylcyclotetrasiloxane component is not subject to the reporting requirements of Sections 302, 304, and 313 of Title III of the Superfund Amendments and Reauthorization Act. It cannot be determined if there are requirements for unknown components.
- **U.S. SARA Hazard Categories (Section 311/312, 40 CFR 370-21):** ACUTE: Yes; CHRONIC: No; FIRE: No; REACTIVE: No; SUDDEN RELEASE: No
- **U.S. SARA Threshold Planning Quantity (TPQ):** There are no specific Threshold Planning Quantities for known components. The default Federal SDS submission and inventory requirement filing threshold of 10,000 lb (4,540 kg) may apply, per 40 CFR 370.20.
- **U.S. CERCLA Reportable Quantity (RQ):** Not applicable for known components.
- **U.S. TSCA Inventory Status:** The Octamethylcyclotetrasiloxane component is listed on the TSCA Inventory. It cannot be determined if the unknown components are listed.

California Safe Drinking Water and Toxic Enforcement Act (Proposition 65): The manufacturer of this product indicates a component is on the California Proposition 65 lists, however no information is given on the identity of this compound.

CANADIAN REGULATIONS:
- **Canadian DSL/NDSL Inventory Status:** The Octamethylcyclotetrasiloxane component is listed on the DSL Inventory. It cannot be determined if other unknown components are on the DSL or NDSL Inventories.
- **Canadian Environmental Protection Act (CEPA) Priorities Substances Lists:** The Octamethylcyclotetrasiloxane component is not on the CEPA Priorities Substances Lists. It cannot be determined if other unknown components are on the lists.
- **Canadian WHMIS Classification and Symbols:** This product would be categorized as a Controlled Product, D2B (Other Toxic Effects-Potential Reproductive Effect) as per the Controlled Product Regulations.
15. REGULATORY INFORMATION (Continued)

CHINESE REGULATIONS:
Chinese Inventory of Existing Chemical Substances Status: Components listed by CAS# are listed on the Chinese Inventory of Existing Chemical Substances (IECSC), or are not listed, per information in Section 2.

JAPANESE REGULATIONS:
Japanese ENCS: Components listed by CAS# are on the ENCS Inventory, are excepted, or are not listed, per information in Section 2. Japanese Ministry of Economy, Trade, and Industry (METI) Status: Components listed by CAS# are not listed as Class I Specified Chemical Substances, Class II Specified Chemical Substances, or Designated Chemical Substances by the Japanese METI, per information in Section 2.

Poisonous and Deleterious Substances Control Law: Components listed by CAS# are not listed as a Specified Poisonous Substance under the Poisonous and Deleterious Substances Control Law, per information in Section 2.

KOREAN REGULATIONS:
Korean Existing Chemicals List (ECL) Status: Components listed by CAS# are listed on the Korean ECL Inventory, per information in Section 2.

MEXICAN REGULATIONS:
Mexican Workplace Regulations (NOM-018-STPS-2000): This product is classified as hazardous.

SINGAPORE REGULATIONS:
List of Controlled Hazardous Substances: Components listed by CAS# in Section 2, are not listed on the Singapore List of Controlled Substances.

Code of Practice On Pollution Control Requirements: The components identified by CAS# in Section 2 (Composition and Information on Ingredients) NOT are subject to the requirements under the Singapore Code of Practice on Pollution Control.

TAIWANESE REGULATIONS:
Taiwan Existing Chemical Substances Inventory Status: Components listed by CAS# in Section 2 are listed on the Taiwan Existing Chemicals List.

16. OTHER INFORMATION

COMPONENT CLASSIFICATION:
Labeling and Classification Full Text under GHS:
Octamethylcyclotetrasiloxane: This is a published and self-classification. Classification: Reproductive Toxicity Category 2, Flammable Liquid Category 3, Acute Oral Toxicity Category 4, Acute Dermal Toxicity Category 4, Acute Inhalation Toxicity Category 4, Aquatic Chronic Toxicity Category 4
Hazard Statements: H361f: Suspected of damaging fertility. Suspected of damaging the unborn child. H302 + H312 + H332: Harmful if swallowed, in contact with skin or if inhaled. H413: May cause long-lasting harmful effects to aquatic life.

DEFINITION OF TERMS
A large number of abbreviations and acronyms appear on a SDS. Some of these, which are commonly used, include the following:
CAS #: This is the Chemical Abstract Service Number that uniquely identifies each constituent.
EXPOSURE LIMITS IN AIR:
CEILING LEVEL: The concentration that shall not be exceeded during any part of the working exposure.
DFG MAKs: Federal Republic of Germany Maximum Concentration Values in the workplace. Exposure limits are given as TWA (Time-Weighted Average) or PEL (short-term exposure) values.
DFG MAK Germ Cell Mutagen Categories: 1: Germ cell mutagens that have been shown to increase the mutant frequency in the progeny of exposed mammals. 2: Germ cell mutagens that have been shown to increase the mutant frequency in the progeny of exposed mammals. 3A: Substances that have been shown to induce genetic damage in germ cells of human animals, or which produce mutagenic effects in somatic cells of mammals in vivo and have been shown to reach the germ cells in an active form. 3B: Substances that are suspected of being germ cell mutagens because of their genotoxic effects in mammalian somatic cell in vivo; in exceptional cases, substances for which there are no in vivo data, but that are clearly mutagenic in vitro and structurally related to known in vivo mutagens. 4: Not applicable (Category 4 carcinogenic substances are those with non-genotoxic mechanisms of action. By definition, germ cell mutagens are genotoxic. Therefore, a Category 4 for germ cell mutagens cannot apply. At some time in the future, it is conceivable that a Category 4 could be established for genotoxic substances with primary targets other than DNA [e.g. purely aneugenic substances] if research results make this seem sensible.): 5: Germ cell mutagens, the potency of which is considered to be so low that, provided the MAK value is observed, their contribution to genetic risk for humans is expected to be insignificant.

DFG MAK Pregnancy Risk Group Classification: Group A: A risk of damage to the developing embryo or fetus has been unequivocally demonstrated. Exposure of pregnant women can lead to damage of the developing organism, even when MAK and BAT (Biological Tolerance Value for Working Materials) values are observed. Group B: Currently available information indicates a risk of damage to the developing embryo or fetus when MAK and BAT values are not observed. Group C: There is no reason to fear a risk of damage to the developing embryo or fetus when MAK and BAT values are observed. Group D: Classification in one of the groups A-C is not yet possible because, although the data available may indicate a trend, they are not sufficient for final evaluation.
IDLH: Immediately Dangerous to Life and Health. This level represents a concentration from which one can escape within 30-minutes without suffering escape-preventing or permanent injury.
LOG: Limit of Quantitation.
NE: Not Established. When no exposure guidelines are established, an entry of NE is made for reference.
NIC: Notice of Intended Change.
EXPOSURE LIMITS IN AIR Continued:
NIOSH CEILING: The exposure that shall not be exceeded during any part of the workday. If instantaneous monitoring is not feasible, the ceiling shall be assumed as a 15-minute TWA exposure (unless otherwise specified) that shall not be exceeded at any time during a workday.
NIOSH RELs: NIOSH's Recommended Exposure Limits. PEL: OSHA's Permissible Exposure Limits. This exposure value means exactly the same as a TLV, except that it is enforceable by OSHA. The OSHA Permissible Exposure Limits are based in the 1989 PELs and the June, 1993 Air Contaminants Rule (Federal Register: 58: 35338-35351 and 58: 40191). Both the current PELs and the vacated PELs are indicated. The phrase, "Vacated 1989 PEL" is placed next to the PEL that was vacated by Court Order.
SKIN: Used when a there is a danger of cutaneous absorption.
STEL: Short Term Exposure Limit, usually a 15-minute time-weighted average (TWA) exposure that should not be exceeded at any time during a workday, even if the 8-hr TWA is within the TLV-TWA, PEL-TWA or REL-TWA.
TLV: Threshold Limit Value. An airborne concentration of a substance that represents conditions under which it is generally believed that nearly all workers may be repeatedly exposed without adverse effect. The duration must be considered, including the 8-hour.
TWA: Time Weighted Average exposure concentration for a conventional 8-hr (TLV, PEL) or up to a 10-hr (REL) workday and a 40-hr workweek.
WEEL: Workplace Environmental Exposure Limits from the AIHA.

HAZARDOUS MATERIALS IDENTIFICATION SYSTEM HAZARD RATINGS:
This rating system is developed by the National Paint and Coating Association and has been adopted by industry to identify the degree of chemical hazards.

WEEL: Workplace Environmental Exposure Limits from the AIHA.
Hazardous Materials Identification System Hazard Ratings (continued):

- reversible corneal opacity; corneal irritation or conjunctival irritation clearing in 8–21 days. Dyes ≥ 26–100, with reversible effects. Oral Toxicity LD₅₀ Rat: ≥ 50–500 mg/kg. Dermal Toxicity LD₅₀ Rat or Rabbit: ≥ 200–1000 mg/kg. Inhalation Toxicity LC₅₀ 4-hrs Rat: ≥ 0.5–2 mg/L. 3 Serious Hazard: Major injury. Essential medical treatment is the immediate removal of contaminated skin and a conventional decontamination. Immediate and continued medical treatment is generally required, and includes reversal of toxic effects. Immediate evacuation is necessary. Substances that may polymerize, decompose, or release energy violently when exposed to moisture.

- foul smelling as asphalt that results in significant fire or explosion. 4 (continued): Substances that Polymerize, Decompose, or放出 Energy Violently When Exposed to Moisture. 

- have a high potential (or high risk) to cause significant heat generation or explosion. Substances that may polymerize, decompose, or self-react at ambient temperature and/or pressure and has a flash point below 37.8°C (100°F) and below 93.4°C (200°F) (i.e. OSHA Class IA). Substances that ignite spontaneously when exposed to air at a temperature of 816°C (1500°F) for a period of 5 minutes under emergency conditions.

- use of this information is not intended to replace expert consultation. These materials are primary skin irritants or sensitizers. Materials whose LD₅₀ for acute oral toxicity is greater than 5 mg/kg but less than or equal to 50 mg/kg. 5 Flammability Hazard: Materials that will not burn under typical fire conditions, including noncombustible materials such as concrete, stone, and sand. These materials will not burn in air exposed to a temperature of 816°C (1500°F) for a period of 5 minutes in accordance with a standard test method. These materials do not meet the criteria for degree of hazard 4. Dusts and mists with an LC₅₀ for acute inhalation toxicity greater than 0.5 mg/L but less than or equal to 2 mg/L. Materials with an LC₅₀ for acute dermal toxicity greater than 200 mg/kg but less than or equal to 1000 mg/kg. Compressed liquefied gases with boiling points below -30°C (-22°F) and -66°C (-89°F) (i.e. Class IC liquids). Materials that cause severe, but reversible irritation to the eyes or are lachrymators. Materials that are primary skin irritants or sensitizers. Materials whose LD₅₀ for acute inhalation toxicity is greater than 50 mg/kg but less than or equal to 500 mg/kg. These materials have a mass explosion hazard or have a projection hazard. A mass explosion is one that affects more than 10 people. These materials have a projection hazard. A projection hazard is one that affects more than 10 people. Materials that generally do not form explosive mixtures with air; but that generally do not form explosive mixtures with air. Liquids having a flash point below 22.8°C (73°F) and having a boiling point at or above 37.8°C (100°F) and below 93.4°C (200°F) (i.e. OSHA Class III). Organic Peroxides: Materials that are readily capable of detonation or explosive decomposition. Materials that ignite spontaneously when exposed to air at a temperature of 816°C (1500°F) for a period of 5 minutes under emergency conditions. Substances that are Non-Explosive.

- unstable at temperatures or, but can become unstable at high temperatures and pressures. These materials may react with water, but will not release energy violently. Explosives: Division 1.6 and 1.6 explosives. Substances that are Non-Explosive. Materials that will rapidly or completely vaporize at atmospheric pressure and normal ambient temperatures. Substances that are Non-Explosive. Materials that ignite spontaneously when exposed to air at a temperature of 54.4°C (130°F) or below (pyrophoric). Physical Hazards: Reactivity: Materials that do not react with water. Organic Peroxides: Materials that are normally stable, even under fire conditions and will not react with water. Explosives: Substances that are Non-Explosive. Compressed Gases: No Rating. Pyrophoric: Packaging Group III oxidizers: Solids: any material that, in either concentration tested, exhibits a mean burning time less than or equal to the mean burning time of a 3.7 potassium bromate/cellulose mixture and the criteria for Packing Group I and II are not met. Materials that ignite spontaneously when exposed to air at a temperature of 816°C (1500°F) for a period of 5 minutes under emergency conditions. Substances that may polymerize, decompose, or release energy violently when exposed to moisture. Substances that may or may not result in a fire, but may become unstable at high temperatures and pressures. Substances that may polymerize, decompose, condense, or self-react at ambient temperature and/or pressure and have a low potential (or low risk) for significant heat generation or explosion. Substances that readily form peroxides upon exposure to air or come into contact with water. Substances that generally do not cause lachrymators. Materials that are primary skin irritants or sensitizers. Materials whose LD₅₀ for acute oral toxicity is greater than or equal to 5 mg/kg but less than or equal to 50 mg/kg. Flammability Hazard: Materials that will not burn under typical fire conditions, including noncombustible materials such as concrete, stone, and sand. Materials that are not met. Materials that are normally stable, but that generally do not form explosive mixtures with air. Solid materials in the form of coarse dusts that may burn rapidly but that generally do not form explosive atmospheres. Materials that are readily capable of detonation or explosive decomposition. Materials that ignite spontaneously when exposed to air at a temperature of 816°C (1500°F) for a period of 5 minutes. Substances that generally do not cause lachrymators. Materials that are primary skin irritants or sensitizers. Materials whose LD₅₀ for acute oral toxicity is greater than or equal to 5 mg/kg but less than or equal to 50 mg/kg. Flammability Hazard: Materials that will not burn under typical fire conditions, including noncombustible materials such as concrete, stone, and sand. Materials that will not burn in air exposed to a temperature of 816°C (1500°F) for a period of 5 minutes in accordance with a standard test method. These materials do not meet the criteria for degree of hazard 4. Dusts and mists with an LC₅₀ for acute inhalation toxicity greater than 0.5 mg/L but less than or equal to 2 mg/L. Materials with an LC₅₀ for acute dermal toxicity greater than 200 mg/kg but less than or equal to 1000 mg/kg. Compressed liquefied gases with boiling points below -30°C (-22°F) and -66°C (-89°F) (i.e. Class IC liquids). Liquids with a flash point greater than 35°C (95°F) that do not sustain combustion when tested using the Method of Testing for Sustained Combustibility, per 49 CFR 173. Appendix H or the UN Recommendations on the Transport of Dangerous Goods, Model Regulations (current edition) and the related Manual of Tests and Criteria (current edition). Liquids with a flash point greater than 35°C (95°F) in a water-miscible solution or dispersion with a noncombustible liquid/solid content of more than 85% by weight. Liquids that have no fire point when tested by ASTM D 92, Standard Test Method for Flash and Fire Points by Cleveland Open Cup, up to the boiling point of the liquid or up to a temperature at which the sample being tested shows an obvious physical change. Combustible pellets with a representative diameter of greater than 2 mm (10 mesh). Most ordinary combustible materials. Solids containing greater than 0.5% by weight of a flammable or combustible solvent are rated by the closed cup flash point of the solvent. 2 Materials that must be moderately heated or exposed to relatively high ambient temperatures before ignition or combustion can occur. Materials in this degree require considerable preheating, under almost all ambient temperature conditions, before ignition and combustion can occur. Materials that will burn in air when exposed to a temperature of 816°C (1500°F) for a period of 5 minutes under emergency conditions. Substances that are Non-Explosive. Substances that are Non-Explosive. Materials that, under normal conditions, do not produce hazardous atmospheres with air, but under high ambient temperatures or under moderate heating could release vapor in sufficient quantities to produce hazardous atmospheres. Gases having a flash point above 37.8°C (100°F); Solid materials in the form of coarse dusts that may burn rapidly but that generally do not form explosive atmospheres; but can become unstable at high temperatures and pressures. These materials may react with water, but will not release energy violently. Explosives: Division 1.6 explosives. Substances that are Non-Explosive. Materials that are normally stable, but that generally do not form explosive mixtures with air. Solid materials in fibrous or shredded form that burn rapidly and create flash fire hazards, such as cotton, sisal, and hemp. Solids and semisolids that readily give off flammable vapors or fumes. Materials whose LD₅₀ for acute oral toxicity is greater than or equal to 5 mg/kg but less than or equal to 50 mg/kg.
NATIONAL FIRE PROTECTION ASSOCIATION HAZARD RATINGS (continued):

INSTABILITY HAZARD: 0 Materials that in themselves are normally stable, even under fire conditions. Materials that have an instantaneous power density (product of heat of reaction and reaction rate) at 250°C (482°F) below 0.01 W/mL. Materials that do not exhibit an exotherm at temperatures less than or equal to 500°C (932°F) when tested by differential scanning calorimetry. 1 Materials that in themselves are normally stable, but that can become unstable at elevated temperatures and pressures. Materials that have an instantaneous power density (product of heat of reaction and reaction rate) at 250°C (482°F) at or above 0.01 W/mL and below 10 W/mL. 2 Materials that readily undergo violent chemical change at elevated temperatures and pressures. Materials that have an instantaneous power density (product of heat of reaction and reaction rate) at 250°C (482°F) at or above 10 W/mL and below 100 W/mL. 3 Materials that in themselves are capable of detonation or explosive decomposition or explosive reaction, but that require a strong initiating source or that must be heated under confinement before initiation. Materials that have an estimated instantaneous power density (product of heat of reaction and reaction rate) at 250°C (482°F) at or above 100 W/mL and below 1000 W/mL. 4 Materials that in themselves are readily capable of detonation or explosive decomposition or explosive reaction at normal temperatures and pressures. Materials that are sensitive to localized thermal or mechanical shock at elevated temperatures and pressures. 4 Materials that in themselves are normally stable, even under fire conditions. Much of the information related to fire and explosion is derived from the National Fire Protection Association (NFPA). Flash Point: Minimum temperature at which a liquid gives off sufficient vapor to form an ignitable mixture with air near the surface of the liquid or within the test vessel used. Autoignition Temperature: Minimum temperature of a solid, liquid, or gas required to initiate or cause self-sustained combustion in air with no other source of ignition. LEL: Lowest concentration of a flammable vapor or gas/air mixture that will ignite and burn with a flame. UEL: Highest concentration of a flammable vapor or gas/air mixture that will ignite and burn with a flame.

FLAMMABILITY LIMITS IN AIR:

Much of the information related to fire and explosion is derived from the National Fire Protection Association (NFPA). Flash Point: Minimum temperature at which a liquid gives off sufficient vapor to form an ignitable mixture with air near the surface of the liquid or within the test vessel used. Autoignition Temperature: Minimum temperature of a solid, liquid, or gas required to initiate or cause self-sustained combustion in air with no other source of ignition. LEL: Lowest concentration of a flammable vapor or gas/air mixture that will ignite and burn with a flame. UEL: Highest concentration of a flammable vapor or gas/air mixture that will ignite and burn with a flame.

TOXICOLOGICAL INFORMATION:

Human and Animal Toxicology: Possible health hazards as derived from human data, animal studies, or from the results of studies with similar compounds are presented. LD₅₀: Lethal Dose (solids & liquids) that kills 50% of the exposed animals. LC₅₀: Lethal Concentration (gases) that kills 50% of the exposed animals. ppm: Concentration expressed in parts of material per million parts of air or water. mg/kg: Quantity of material, by weight, administered to a test subject, based on their body weight in kg. TDL₉₀: Lowest dose to cause a symptom. TDL₀: Lowest concentration to cause a symptom. TDL₉₀: and TDL₀, or TC; TCD; TLC₀, and LLC₀: Lowest dose (or concentration) to cause lethal or toxic effects. Cancer Information: IARC: International Agency for Research on Cancer. NTP: National Toxicology Program. RTECS: Registry of Toxic Effects of Chemical Substances. IARC and NTP rate chemicals on a scale of decreasing potential to cause human cancer with rankings from 1 to 4. Subrankings (2A, 2B, etc.) are also used. Other Information: BET: ACGIH Biological Exposure Indices, represent the levels of determinants which are most likely to be observed in specimens collected from a healthy worker who has been exposed to chemicals to the same extent as a worker with inhalation exposure to the TLV.

ECOLOGICAL INFORMATION:

ELC: Effect concentration in water. BCF: Bioconcentration Factor, which is used to determine if a substance will concentrate in life forms that consume contaminated plant or animal matter. Tlµ: Median threshold limit. log Kₐw or log Koc: Coefficient of Oil/Water Distribution is used to assess a substance’s behavior in the environment.

REGULATORY INFORMATION:

U.S.:

EPA: U.S. Environmental Protection Agency. ACGIH: American Conference of Governmental Industrial Hygienists, a professional association that establishes exposure limits. OSHA: U.S. Occupational Safety and Health Administration. NIOSH: National Institute of Occupational Safety and Health, which is the research arm of OSHA. DOT: U.S. Department of Transportation. TC: Transport Canada. SARA: Superfund Amendments and Reauthorization Act. TSCA: U.S. Toxic Substance Control Act. CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act. Marine Pollutant status according to the DOT; CERCLA or Superfund; and various state regulations. This section also includes information on the precautionary warnings that appear on the material's package label.

CANADA: