

SAFETY DATA SHEET



SpecSeal® Series SIL 300 SL Silicone Firestop Sealants

1. PRODUCT IDENTIFICATION

IDENTIFICATION of the SUBSTANCE or PREPARATION

<u>TRADE NAME (AS LABELED):</u>	SpecSeal® Series SIL 300 SL Silicone Firestop Sealant
<u>PRODUCT DESCRIPTION:</u>	Silicone Sealant
<u>CHEMICAL NAME/CLASS:</u>	Silicone
<u>SYNONYMS:</u>	Self-Leveling SIL300SL

COMPANY/UNDERTAKING IDENTIFICATION:

<u>SUPPLIER/MANUFACTURER'S NAME:</u>	Specified Technologies Inc.
<u>ADDRESS:</u>	200 Evans Way, Somerville, NJ 08876
<u>EMERGENCY PHONE:</u>	(800) 255-3924
<u>BUSINESS PHONE:</u>	(908) 526-8000 (Mon–Fri, 8 AM–5 PM ET)

<u>PREPARATION DATE:</u>	November 10, 2014
<u>REVISION DATE:</u>	July 12, 2017

This product is sold for commercial use. This SDS has been developed to address safety concerns of those individuals working with bulk quantities of this material, as well as those of potential users of this product in industrial/occupational settings. ALL United States Occupational Safety and Health Administration Standard (29 CFR 1910.1200), U.S. State equivalent Standards, Canadian WHMIS 2015 and the Global Harmonization required information is included in appropriate sections based on the Global Harmonization Standard format. This product has been classified in accordance with the hazard criteria of the countries listed above and the SDS contains all the information required by the Canadian WHMIS 2015 [HPR-GHS], the Global Harmonization Standard and OSHA 1910.120.

2. HAZARD IDENTIFICATION

GLOBAL HARMONIZATION LABELING AND CLASSIFICATION: Classified in accordance with Global Harmonization Standard under U.S. OSHA Hazard Communication Standard, Canadian WHMIS HPR-GHS 2015.

Classification: Skin Irritation Cat. 2, Eye Irritation Cat. 2A, Skin Sensitization Cat. 1B, Aquatic Chronic Cat. 4

Signal Word: Warning

Hazard Statement Codes: H315, H319, H317, H413

Precautionary Statement Codes: P261, P264, P270, P271, P273, P280, P302 + P352, P333 + P313, P362 + P364, P305 + P351 + P338, P337 + P313, P321, P501

Hazard Symbols/Pictograms: GHS07



EMERGENCY OVERVIEW:

Physical Description: This product is a thick, viscous, white to off-white liquid with a mild odor. The SIL300SL form of product is pourable.

Health Hazards: CAUTION! May cause eye, skin, and respiratory tract irritation, especially if exposure is prolonged. May be harmful if swallowed. This product may have skin sensitization effects as it contains multiple compounds suspected of skin sensitization. Heating can release trace amounts of formaldehyde, a known human carcinogen.

Flammability Hazard: Although this product is formulated to be non-flammable and non-combustible, it may ignite if exposed to direct flame for a prolonged period.

Reactivity Hazard: This product cures upon contact with water or prolonged exposure to air, but will not polymerize.

Environmental Hazard: This product has not been tested for environmental impact. All release to the environment should be avoided.

HAZARDOUS MATERIALS IDENTIFICATION SYSTEM (HMIS®)

Health	2*
Flammability	1
Physical Hazard	0

See Section 16 for definitions of ratings

0 = Minimal 3 = Serious
1 = Slight 4 = Severe
2 = Moderate * = Chronic

HMIS® is a registered trademark of the National Paint and Coatings Association.

CANADIAN WHMIS (HPR-GHS) 2015 CLASSIFICATION AND SYMBOLS: See Section 16 for in Classification and Symbols under HPR-GHS 2015.

U.S. OSHA REGULATORY STATUS: This material is classified as hazardous under OSHA regulations.

3. COMPOSITION AND INFORMATION ON INGREDIENTS

Chemical Name	CAS #	W/W%	LABEL ELEMENTS GHS Classification under U.S. OSHA Hazard Communication Standard & Canadian WHMIS (HPR-GHS) 2015 Hazard Statement Codes
Calcium Carbonate, Natural	1317-65-3	20.0-40.0	NOTIFIED CLASSIFICATION Classification: Skin Irritation Cat. 2 Hazard Statement Codes: H315
Polydimethyl Siloxane Diol Contains the following compound	70131-67-8	15.0-25.0	NOTIFIED CLASSIFICATION Classification: Eye Irritation Cat. 2A Hazard Statement Codes: H319 SUPPLIER SELF-CLASSIFICATION DUE TO COMPOUND GIVEN BELOW Classification: Reproductive Toxicity Cat. 2 Hazard Statement Codes: H361f
Octamethylcyclotetra-siloxane	556-67-2	>= 0.02 to < 0.5	HARMONISED CLASSIFICATION AND LABELLING (CLP00) Classification: Reproductive Toxicity Cat. 2, Aquatic Chronic Toxicity Cat. 4 Hazard Statement Codes: H361f, H413 ADDITIONAL SELF-CLASSIFICATION Classification: Flammable Liquid Cat. 3, Acute Oral Toxicity Cat. 4, Acute Dermal Toxicity Cat. 4 Hazard Statement Codes: H226, H302 + H312
Polydimethylsiloxane	63148-62-9	8.0-20.0	NOTIFIED CLASSIFICATION Classification: Eye Irritation Cat. 2A, Aquatic Chronic Toxicity Cat. 4 Hazard Statement Codes: H319, H413
Aluminum Trihydrate	21645-51-2	10.0-15.0	SELF CLASSIFICATION Classification: Eye Irritation Cat. 2 Hazard Statement Codes: H319
Solvent Naphtha (petroleum) Heavy Alkylate (contains less than 0.1% benzene)	64741-65-7	8.0-12.0	HARMONISED CLASSIFICATION - ANNEX VI OF REGULATION (EC) NO 1272/2008 (CLP REGULATION) Classification: Aspiration Hazard Cat. 1 Hazard Statement Codes: H304 ADDITIONAL SELF-CLASSIFICATION Classification: Flammable Liquid Cat. 3, Skin Irritation Cat. 2, STOT (Central Nervous System) SE Cat. 3, Aquatic Chronic Cat. 2 Hazard Statement Codes: H226, H315, H336, H411
Methyl tris(2-butanoneoxime) Silane	22984-54-9	1.0-5.0	NOTIFIED CLASSIFICATION Classification: Skin Irritation Cat. 2, Eye Irritation Cat. 2A, Skin Sensitization Cat. 1B, STOT (Oral-Cardiovascular) RE Cat. 2 Hazard Statement Codes: H319, H315, H317, H372
Amorphous Fumed Silica, crystalline free	112945-52-5	1.0-4.0	NOTIFIED CLASSIFICATION Classification: Skin Irritation Cat. 2, Eye Irritation Cat. 2A, STOT (Inhalation-Respiratory Irritation) Se Cat. 3 Hazard Statement Codes: H315, H319, H335
Tetra(Methylethyl ketoxomo) Silane	34206-40-1	0.1-0.5	NOTIFIED CLASSIFICATION Classification: Skin Irritation Cat. 2, Eye Irritation Cat. 2A, Skin Sensitization Cat. 1B, STOT (Oral-Cardiovascular) RE Cat. 2 Hazard Statement Codes: H319, H315, H317, H372
N-(2-aminoethyl)-N'-[3-(trimethoxysilyl)propyl] ethylenediamine	35141-30-1	0.1-0.4	NOTIFIED CLASSIFICATION Classification: Skin Corrosion Cat. 1B, Acute Dermal Toxicity Cat. 4, Skin Sensitization Cat. 1B, Aquatic Chronic Toxicity Cat. 2 Hazard Statement Codes: H314, H312, H317, H411
Mixture of trace components. Each of the other components is present in less than 1 percent concentration (0.1% concentration for potential carcinogens, reproductive toxins, respiratory tract sensitizers, and mutagens).		Balance	Classification: Not Applicable

The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST-AID MEASURES

PROTECTION OF FIRST AID RESPONDERS: Rescuers should not attempt to retrieve victims of exposure to this material without adequate personal protective equipment. Rescuers should be taken for medical attention, if necessary.

DESCRIPTION OF FIRST AID MEASURES: Remove victim(s) to fresh air, as quickly as possible. Only trained personnel should administer supplemental oxygen and/or cardio-pulmonary resuscitation, if necessary. Remove and isolate contaminated clothing and shoes. Seek immediate medical attention. Take copy of label and MSDS to physician or other health professional with victim(s).

Inhalation: If aerosols from product are inhaled, remove victim to fresh air. If necessary, use artificial respiration to support vital functions.

Skin Exposure: If the material contaminates the skin, immediately begin decontamination with running water. Minimum flushing is for 20 minutes. Do not interrupt flushing. Remove exposed or contaminated clothing, taking care not to contaminate eyes. Victim must seek immediate medical attention.

Eye Exposure: If this product enters the eyes, open victim's eyes while under gently running water. Use sufficient force to open eyelids. Have victim "roll" eyes. Minimum flushing is for 20 minutes. Do not interrupt flushing.

Ingestion: If this product is swallowed, CALL PHYSICIAN OR POISON CONTROL CENTER FOR MOST CURRENT INFORMATION. DO NOT INDUCE VOMITING, unless directly by medical personnel. Have victim rinse mouth with water or give several cupfuls of water, if conscious. Never induce vomiting or give diluents (milk or water) to someone who is unconscious, having convulsions, or unable to swallow. If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain an open airway and prevent aspiration.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Dermatitis or other pre-existing skin disorders may be aggravated by overexposures to this product.

INDICATION OF IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT IF NEEDED: Treat symptoms and eliminate overexposure.

5. FIRE-FIGHTING MEASURES

FLASH POINT (est.): > 92.8°C (> 199°F)

AUTOIGNITION: Unknown.

FLAMMABLE LIMITS IN AIR: Unknown.

EXTINGUISHING MEDIA:

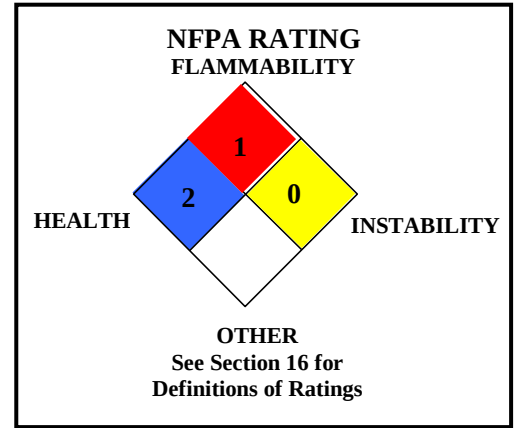
Suitable Extinguishing Media: Use extinguishing material suitable to the surrounding fire, including foam, halon, carbon dioxide, water spray and dry chemical.

Unsuitable Extinguishing Media: None known.

PROTECTION OF FIREFIGHTERS:

Special Fire And Explosion Hazards: Although this product is formulated to be non-flammable and non-combustible, it may ignite if exposed to direct flame for a prolonged period. Not sensitive to mechanical impact under normal conditions. Closed containers may develop pressure and rupture in event of fire or if contaminated with water. Contact with water can generate flammable methanol and methyl ethyl ketoxime.

Special Protective Actions For Fire-Fighters: Incipient fire responders should wear eye protection. Structural firefighters must wear Self-Contained Breathing Apparatus and full protective equipment. Move containers from fire area if it can be done without risk to personnel. If possible, prevent runoff water from entering storm drains, bodies of water, or other environmentally sensitive areas.



6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS AND EMERGENCY PROCEDURES: An accidental release can result in a fire. Uncontrolled releases should be responded to by trained personnel using pre-planned procedures. Proper protective equipment should be used. Eliminate any possible sources of ignition, and provide maximum explosion-proof ventilation. Use only non-sparking tools and equipment during the response. The atmosphere must at least 19.5 percent Oxygen before non-emergency personnel can be allowed in the area without Self-Contained Breathing Apparatus and fire protection.

PERSONAL PROTECTIVE EQUIPMENT: Responders should wear the level of protection appropriate to the type of chemical released, the amount of the material spilled, and the location where the incident has occurred.

Small Spills: For releases of 1 drum or less, Level D Protective Equipment (gloves, chemical resistant apron, boots, and eye protection) should be worn.

Large Spills: Minimum Personal Protective Equipment should be rubber gloves, rubber boots, face shield, and Tyvek suit. Minimum level of personal protective equipment for releases in which the level of oxygen is less than 19.5% or is unknown must be **Level B: triple-gloves (rubber gloves and nitrile gloves over latex gloves), chemical resistant suit, fire-retardant clothing and boots, hard hat, and Self-Contained Breathing Apparatus.**

METHODS FOR CLEAN-UP AND CONTAINMENT:

All Spills: Access to the spill area should be restricted. Spread should be limited by gently covering the spill with polypads. Absorb spilled liquid with clay, sand, polypads, or other suitable inert absorbent materials. All contaminated absorbents and other materials should be placed in an appropriate container and seal. Do not mix with wastes from other materials. Dispose of in accordance with applicable Federal, State, and local procedures (see Section 13, Disposal Considerations). Dispose of recovered material and report spill per regulatory requirements. Remove all residue before decontamination of spill area. Clean spill area with soap and copious amounts of water. Monitor area for combustible vapor levels and confirm levels are below exposure limits given in Section 8 (Exposure Controls-Personal Protection), if applicable, and that levels are below applicable LELs (see Section 5 – Fire Fighting Measures) before non-response personnel are allowed into the spill area. Purge equipment with inert gas prior to reuse.

ENVIRONMENTAL PRECAUTIONS: Minimize use of water to prevent environmental contamination. Prevent spill or rinsate from contaminating storm drains, sewers, soil or groundwater. Place all spill residues in a suitable container and seal. Do not discharge effluent containing this product into streams, ponds, estuaries, oceans or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance, contact your State Water Board or Regional Office of the EPA.

OTHER INFORMATION: U.S. regulations may require reporting of spills of this material that reach surface waters if a sheen is formed. If necessary, the toll-free phone number for the US Coast Guard National Response Center is 1-800-424-8802.

REFERENCE TO OTHER SECTIONS: See information in Section 8 (Exposure Controls – Personal Protection) and Section 13 (Disposal Considerations) for additional information.

7. HANDLING and STORAGE

PRECAUTIONS FOR SAFE HANDLING: As with all chemicals, avoid getting this product ON YOU or IN YOU. Wash thoroughly after handling this product. Do not eat or drink while handling this material. Avoid contact with eyes, skin, and clothing. Avoid breathing fumes, dusts, vapors or mist. Do not taste or swallow. Use only with adequate ventilation. Contaminated clothing needs to be laundered prior to reuse. Keep away from heat and flame. In the event of a spill, follow practices indicated in Section 6: ACCIDENTAL RELEASE MEASURES.

CONDITIONS FOR SAFE STORAGE: Keep container tightly closed when not in use. Store containers in a cool, dry location, away from direct sunlight, sources of intense heat, or where freezing is possible. Material should be stored in secondary containers or in a diked area, as appropriate. Inspect all incoming containers before storage, to ensure containers are properly labeled and not damaged. Have appropriate extinguishing equipment in the storage area (such as sprinkler systems or portable fire extinguishers). Inspect all incoming containers before storage to ensure containers are properly labeled and not damaged. Empty containers may contain residual product; therefore, empty containers should be handled with care.

PRODUCT USE: This product is used as a caulking compound. Follow all industry standards for use of this product.

8. EXPOSURE CONTROLS - PERSONAL PROTECTION

EXPOSURE LIMITS/CONTROL PARAMETERS:

Ventilation and Engineering Controls: Use with adequate, explosion proof ventilation to ensure exposure levels are maintained below the limits provided in this section.

Occupational/Workplace Exposure Limits/Guidelines:

Chemical Name	CAS #	Guideline	Value
Aluminum Trihydrate	21645-51-2	NE	NE
N-(2-aminoethyl)-N'-[3-(trimethoxysilyl)propyl] ethylenediamine	35141-30-1	NE	NE
Amorphous Fumed Silica	112945-52-5	NE	NE
Calcium Carbonate	1317-65-3	OSHA PEL TWA NIOSH REL TWA	15 mg/m ³ Total Dust; 5 mg/m ³ Respirable Fraction 10 mg/m ³ Total Dust; 5 mg/m ³ Respirable Fraction
Methyl tris(2-Butanoneoxime) Silane	22984-54-9	NE	NE
Octamethylcyclotetrasiloxane	556-67-2	NE	NE
Polydimethyl Siloxane	63148-62-9	NE	NE
Polydimethyl Siloxane Diol	70131-67-8	NE	NE
Solvent Naphtha (petroleum) Heavy Alkylate Exposure limits given are for Mineral Spirits CAS # 8052-41-3	64741-65-7	ACGIH TLV TWA OSHA PEL TWA NIOSH REL TWA NIOSH REL STEL	525 mg/m ³ 2900 mg/m ³ 350 mg/m ³ 1800 mg/m ³ (15 min.)
Tetra(Methylethyl ketoximo) silane	34206-40-1	NE	NE
The following compounds are possible reaction products from contact with water:			
Methanol	67-56-1	ACGIH TLV TWA ACGIH TLV STEL OSHA PEL TWA OSHA PEL STEL NIOSH REL TWA NIOSH REL STEL NIOSH IDLH DFG MAK TWA DFG MAK PEAK DFG MAK Pregnancy Risk Class	200 ppm (skin) 250 ppm (skin) 200 ppm 200 ppm [skin] (vacated 1989 PEL) 200 ppm (skin) 250 (skin) 6000 ppm 200 ppm (skin) 4•MAK 15 minute average value, 1-hr interval 4 per shift C
Methyl Ethyl Ketoxime	96-29-7	DFG MAK TWA AIHA WEEL TWA	Skin, Danger of Sensitization of the Skin 10 ppm DSEN: May cause dermal sensitization.

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

Biological Exposures Indices (BEIs): There are no BEI's established for any component of this product at this time. The following BEIs are in force for the hydrolysis product, methanol

CHEMICAL: DETERMINANT	SAMPLING TIME	BEI
Methanol • Methanol in Urine	• End of Shift	• 15 mg/L

PERSONAL PROTECTIVE EQUIPMENT (PPE): The following information on appropriate Personal Protective Equipment is provided to assist employers in complying with OSHA regulations found in 29 CFR Subpart I (beginning at 1910.132, including the Respiratory Protection Standard (29 CFR 1910.134), Eye Protection Standard 29 CFR 1910.13, the Hand Protection Standard 29 CFR 1910.138, and the Foot Protection Standard 29 CFR 1910.136), equivalent standards of Canada (including the Canadian CSA Respiratory Standard Z94.4-93-02, the CSA Eye Protection Standard Z94.3-M1982, Industrial Eye and Face Protectors and the Canadian CSA Foot Protection Standard Z195-M1984, Protective Footwear). Please reference applicable regulations and standards for relevant details.

Eye/Face Protection: Use approved safety goggles or safety glasses. If necessary, refer to appropriate regulations.

Skin Protection: Wear chemical impervious gloves (e.g., Nitrile or Neoprene). Use triple gloves for spill response. If necessary, refer to appropriate regulations.

Body Protection: Use body protection appropriate for task (e.g., lab coat, coveralls, Tyvek suit). If necessary, refer to the OSHA Technical Manual (Section VII: Personal Protective Equipment) or appropriate Standards of Canada. If a hazard of injury to the feet exists due to falling objects, rolling objects, where objects may pierce the soles of the feet or where employee's feet may be exposed to electrical hazards, use foot protection, as described in appropriate regulations.

Respiratory Protection: If mists or sprays from this product are created during use, use appropriate respiratory protection. If necessary, use only respiratory protection authorized in appropriate regulations. Oxygen levels below 19.5% are considered IDLH by OSHA. In such atmospheres, use of a full-facepiece pressure/demand SCBA or a full facepiece, supplied air respirator with auxiliary self-contained air supply is required under appropriate regulations.

9. PHYSICAL and CHEMICAL PROPERTIES

FORM: Thick viscous liquid, but pourable.

MOLECULAR WEIGHT: Mixture.

ODOR: Mild

SPECIFIC GRAVITY: 9 lbs/g (29.9 g/L)

RELATIVE VAPOR DENSITY (air = 1): Heavier than air.

SOLUBILITY IN WATER: Insoluble.

MELTING/FREEZING POINT: Not established.

VOC (ASTM D2369): SIL300SL: < 47 g/L

FLASH POINT (est.): > 92.8°C (> 199°F)

FLAMMABLE LIMITS (in air by volume, %): Lower: Not established; Upper: Not established.

VISCOSITY: 25,000 cPs

COLOR: Off-white.

MOLECULAR FORMULA: Mixture.

ODOR THRESHOLD: Not available.

VAPOR PRESSURE, mm Hg @ 20°C: Not established.

EVAPORATION RATE (BuAc = 1): < 1

OTHER SOLUBILITIES: Not available.

BOILING POINT: Not established.

WEIGHT/LBS GALLON: SIL300SL: 11.5

AUTOIGNITION TEMPERATURE: Not established.

9. PHYSICAL and CHEMICAL PROPERTIES (Continued)

COEFFICIENT OF OIL/WATER DISTRIBUTION (PARTITION COEFFICIENT): Not established.

HOW TO DETECT THIS SUBSTANCE (WARNING PROPERTIES): The appearance and odor of this product may act as warning properties in the event of an accidental release.

10. STABILITY and REACTIVITY

CHEMICAL STABILITY: Stable under normal circumstances of use and handling. When heated above 150°C (302°F), this product can release formaldehyde. Methyleneethyl ketoxime may be generated during curing.

CONDITIONS TO AVOID: Avoid contact with incompatible chemicals and exposure to extreme temperatures.

INCOMPATIBLE MATERIALS: This product is not compatible with strong bases, strong acids, and powerful oxidizers and metals such as iron.

HAZARDOUS DECOMPOSITION PRODUCTS: **Combustion:** Thermal decomposition of this product can generate aluminum, calcium, carbon, silicon and nitrogen oxides, formaldehyde, and unknown hydrocarbons). **Hydrolysis:** Methyleneethyl ketoxime, methanol.

POSSIBILITY OF HAZARDOUS REACTIONS/POYMERIZATION: This product is not expected to undergo hazardous polymerization, decomposition, condensation or self-reactivity. Product slowly cures upon contact with moisture in air.

11. TOXICOLOGICAL INFORMATION

POTENTIAL HEALTH EFFECTS: The most significant routes of occupational overexposure are inhalation and contact with skin and eyes. The symptoms of overexposure to this product are as follows:

Contact with Skin or Eyes: Contact may mildly irritate the skin and cause redness and discomfort. Prolonged or repeated skin contact may cause dermatitis (dry, red skin). Eye contact may cause redness, pain, and tearing. In persons susceptible to the Methyl tris(2-butanoneoxime) Silane and other skin sensitization components, skin sensitization may occur. Skin contact may cause sensitization and allergic reaction in susceptible individuals. Symptoms may include redness, itching and rash.

Skin Absorption: Some components of this product are known to be absorbed through intact skin. Skin contact may cause some systemic effects if a large area of skin is contaminated.

Ingestion: If the product is swallowed, it may mildly irritate the mouth, throat, and other tissues of the gastro-intestinal system and may cause nausea, vomiting, and diarrhea.

Inhalation: Exposure to vapors of this product generated during curing, or dusts of this product generated during use after curing may mildly irritate the respiratory tract and cause coughing and sneezing. Vapors or fumes when used in an enclosed space, if heated or during curing may cause irritation of the respiratory system. Symptoms include nose irritation, dry or sore or burning throat, runny nose, shortness of breath, dizziness, incoordination.

Injection: Accidental injection of this product (e.g. puncture with a contaminated object) may cause burning, redness, and swelling in addition to the wound.

Chronic Effects: Prolonged or repeated skin contact may cause dermatitis (dry, red skin) and sensitization to the skin or adverse cardiovascular effects.

TOXICITY DATA: There are currently no toxicity data available for this product; the following toxicology data are available for components greater than 1% in concentration.

ALUMINUM TRIHYDRATE:

TDLo (Oral-Child) 79 gm/kg/2 years-intermittent: Behavioral: changes in motor activity (specific assay), muscle contraction or spasticity; Musculoskeletal: osteomalacia

TDLo (Oral-Child) 122 gm/kg/4 days: Gastrointestinal: other changes; Nutritional and Gross Metabolic: body temperature increase

TDLo (Oral-Infant) 68040 mg/kg/24 weeks-intermittent: Musculoskeletal: osteoporosis; Nutritional and Gross Metabolic: weight loss or decreased weight gain, changes in phosphorus

TDLo (Oral-Woman) 73912.5 mg/kg/26 weeks-intermittent: Blood: changes in serum composition (e.g. TP, bilirubin, cholesterol); Musculoskeletal: osteoporosis; Nutritional and Gross: Metabolic: changes in phosphorus

TDLo (Oral-Woman) 84 gm/kg: female 1-40 week(s) after conception: Reproductive: Effects on Newborn: physical

TDLo (Unreported-Infant) 39 gm/kg/24 days-intermittent: Musculoskeletal: osteomalacia

TDLo (Oral-Rat) 15 mg/kg: Gastrointestinal: other changes

TDLo (Oral-Rat) 8040 mg/kg/67 days-continuous: Blood: changes in serum composition (e.g. TP, bilirubin, cholesterol); Nutritional and Gross Metabolic: changes in phosphorus

TDLo (Oral-Mouse) 80,880 mg/kg/23 weeks-continuous: Liver: other changes; Musculoskeletal: other changes; Nutritional and Gross Metabolic: changes in metals, not otherwise specified

TDLo (Intraperitoneal-Rat) 150 mg/kg

TDLo (Intraperitoneal-Rat) 6240 mg/kg/26 weeks-intermittent: Blood: pigmented or nucleated red blood cells; Nutritional and Gross Metabolic: weight loss or decreased weight gain, changes in iron

TDLo (Intraperitoneal-Rat) 1920 mg/kg/8 weeks-intermittent: Blood: microcytosis with or without anemia

TDLo (Intraperitoneal-Rat) 960 mg/kg/4 weeks-intermittent: Blood: changes in erythrocyte (RBC) count

AMORPHOUS FUMED SILICA:

LD₅₀ (Oral-Rat) 3160 mg/kg

LD₅₀ (Intravenous-Rat) 15 mg/kg: Lungs, Thorax, or Respiration: acute pulmonary edema

TCLo (Inhalation-Rat) 154 mg/m³/6 hours/4 weeks-intermittent: Lungs, Thorax, or Respiration: structural or functional change in trachea or bronchi; Biochemical: Enzyme inhibition, induction, or change in blood or tissue levels: dehydrogenases, Metabolism (Intermediary): other proteins

TCLo (Inhalation-Rat) 5.41 mg/m³/5 days-intermittent: Lungs, Thorax, or Respiration: other changes, changes in lung weight; Biochemical: Metabolism (Intermediary): effect on inflammation or mediation of inflammation

TCLo (Inhalation-Rat) 1.39 mg/m³/5 days-intermittent: Nutritional and Gross Metabolic: weight loss or decreased weight gain

TDLo (Intratracheal-Mouse) 96.77 mg/kg: Lungs, Thorax, or Respiration: acute pulmonary edema, other changes; Biochemical: Metabolism (Intermediary): effect on inflammation or mediation of inflammation

TDLo (Intratracheal-Mouse) 2 mg/kg; 2 mg/kg: Lungs, Thorax, or Respiration: fibrosis, focal (pneumoconiosis), other changes; Biochemical: Metabolism (Intermediary): effect on inflammation or mediation of inflammation

AMORPHOUS FUMED SILICA (continued):

TDLo (Intratracheal-Mouse) 50 mg/kg: Lungs, Thorax, or Respiration: changes in lung weight

TDLo (Intratracheal-Mouse) 2 mg/kg: Lungs, Thorax, or Respiration: other changes; Biochemical: Enzyme inhibition, induction, or change in blood or tissue levels: peptidases

TDLo (Intratracheal-Mouse) 2 mg/kg: Lungs, Thorax, or Respiration: fibrosing alveolitis; Biochemical: Enzyme inhibition, induction, or change in blood or tissue levels: peptidases, Metabolism (Intermediary): effect on inflammation or mediation of inflammation

LDLo (Intratracheal-Rat) 50 mg/kg

LDLo (Intratracheal-Rat) 10 mg/kg

LDLo (Intratracheal-Mouse) 96.77 mg/kg: Lungs, Thorax, or Respiration: acute pulmonary edema, dyspnea, other changes

CALCIUM CARBONATE, NATURAL:

TDLo (Intravenous-Rat) 30 mg/kg: Vascular: BP lowering not characterized in autonomic section; Lungs, Thorax, or Respiration: changes in lung weight; Blood: other changes

TCLo (Inhalation-Rat) 84 mg/m³/4 hours/40 weeks-intermittent: Lungs, Thorax, or Respiration: fibrosis (interstitial); Liver: other changes; Kidney/Ureter/Bladder: other changes

TCLo (Inhalation-Rat) 250 mg/m³/2 hours/24 weeks-intermittent: Lungs, Thorax, or Respiration: fibrosis, focal (pneumoconiosis)

POLYDIMETHYL SILOXANE:

Standard Draize Test (Skin-Rabbit) 500 µL/24 hours: Mild

Standard Draize Test (Eye-Rabbit) 100 µL/24 hours: Mild

LD₅₀ (Oral-Rat) > 24 gm/kg: Gastrointestinal: hypermotility, diarrhea

LD₅₀ (Oral-Rat) > 17 gm/kg: Kidney/Ureter/Bladder: other changes; Nutritional and Gross Metabolic: other changes

LD₅₀ (Skin-Rabbit) > 2 gm/kg: Behavioral: food intake (animal); Gastrointestinal: hypermotility, diarrhea; Skin and Appendages: dermatitis, other (after systemic exposure)

LD (Oral-Rat) > 5 gm/kg

LD (Intramuscular-Rat) > 1200 µL/kg: Immunological Including Allergic: increase in humoral immune response

LD (Skin-Rabbit) > 10,200 mg/kg

LDLo (Intraperitoneal-Mouse) 16 mL/kg: Gastrointestinal: hypermotility, diarrhea, Immunological Including Allergic: decrease in cellular: decrease in humoral immune response

TDLo (Oral-Rat) 1800 mL/kg/26 weeks-continuous: Lungs, Thorax, or Respiration: changes in lung weight; Liver: changes in liver weight; Kidney/Ureter/Bladder: other changes in urine composition

TDLo (Oral-Rat) 227 gm/kg: Sense Organs and Special Senses (Eye): corneal damage; Behavioral: food intake (animal); Blood: changes in serum composition (e.g. TP, bilirubin, cholesterol)

TDLo (Subcutaneous-Rat) 10 gm/kg: female 6-15 day(s) after conception: Reproductive: Specific Developmental Abnormalities: musculoskeletal system

TDLo (Subcutaneous-Rat) 8 gm/kg: female 15-22 day(s) after conception: Reproductive: Effects on Newborn: stillbirth

11. TOXICOLOGICAL INFORMATION (Continued)

TOXICITY DATA (continued):

POLYDIMETHYL SILOXANE (continued):

TDLo (Subcutaneous-Rabbit) 260 mg/kg; female 6-18 day(s) after conception: Reproductive: Effects on Embryo or Fetus: fetal death; Reproductive: Specific Developmental Abnormalities: body wall

POLYDIMETHYL SILOXANE DIOL:

LD₅₀ (Oral-Rat) > 64 mL/kg; Gastrointestinal: other changes; Liver: other changes; Nutritional and Gross Metabolic: other changes

POLYDIMETHYL SILOXANE DIOL (continued):

LD₅₀ (Oral-Rat) > 15,400 mg/kg; Sense Organs and Special Senses (Eye): ptosis; Behavioral: somnolence (general depressed activity); Kidney/Ureter/Bladder: urine volume increased
LD₅₀ (Skin-Rabbit) > 16 mL/kg; Kidney/Ureter/Bladder: other changes; Nutritional and Gross Metabolic: other changes
LD₅₀ (Skin-Rabbit) > 2 gm/kg
LC₅₀ (Inhalation-Rat) > 8750 mg/m³/7 hours; Lungs, Thorax, or Respiration: other changes

CARCINOGENIC POTENTIAL: The following table summarizes the carcinogenicity listing for the components of this product. "NO" indicates that the substance is not considered to be or suspected to be a carcinogen by the listed agency, see section 16 for definitions of other ratings.

CHEMICAL	IARC	NTP	NIOSH	ACGIH	OSHA	PROP 65
Aluminum Trihydrate	No	No	No	No	No	No
N-(2-aminoethyl)-N'-[3-(trimethoxysilyl)propyl] ethylenediamine	No	No	No	No	No	No
Amorphous Fumed Silica	No	No	No	No	No	No
Calcium Carbonate	No	No	No	A4	No	No
Methyl tris(2-butanoneoxime) Silane	No	No	No	No	No	No
Solvent Naphtha (petroleum) Heavy Alkylate	No	No	No	No	No	No
Octamethylcyclotetrasiloxane	No	No	No	No	No	No
Polydimethylsiloxane	No	No	No	No	No	No
Polydimethylsiloxane Diol	No	No	No	No	No	No
Tetra(Methylethyl ketoxomo) Silane	No	No	No	No	No	No
The following are compounds from reaction with water:						
Methanol	No	No	No	No	No	No
Methyl Ethyl Ketoxime	No	No	No	No	No	No

ACGIH TLV-A4: Not Classifiable as a Human Carcinogen.

IRRITANCY OF PRODUCT: This product may irritate contaminated tissue, especially if contact is prolonged.

SENSITIZATION TO THE PRODUCT: This product may cause skin sensitization and allergic reaction in susceptible individuals due to the Methyl tris(2-butoxanoneoxime) silane and other components.

TOXICOLOGICAL SYNERGISTIC PRODUCTS: None known.

REPRODUCTIVE TOXICITY INFORMATION: This product has not been tested for reproductive toxicity. No information is available for components on mutagenicity, embryotoxicity, teratogenicity or reproductive toxicity.

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.

BIO-ACCUMULATION POTENTIAL: This product has not been tested for bio-accumulation potential.

ECOTOXICITY: This product has not been tested for aquatic or animal toxicity. All release to terrestrial, atmospheric and aquatic environments should be avoided.

OTHER ADVERSE EFFECTS: This material is not expected to have any 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

PREPARING WASTES FOR DISPOSAL: As supplied, this product would not be a hazardous waste as defined by U.S. federal regulation (40 CFR 261) if discarded or disposed. State and local regulations may differ from federal regulations. The generator of the waste is responsible for proper waste determination and management.

U.S. EPA WASTE NUMBER: Wastes of this material should be test to see if they meet the criteria of D001 (Ignitability characteristic).

14. TRANSPORTATION INFORMATION

U.S. DEPARTMENT OF TRANSPORTATION: 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 SHIPPING INFORMATION (IATA): This product is NOT classified as dangerous goods, per the International Air Transport Association.

INTERNATIONAL MARITIME ORGANIZATION SHIPPING INFORMATION (IMO): This product is NOT classified as dangerous goods, per the International Maritime Organization.

15. REGULATORY INFORMATION

U.S. REGULATIONS:

U.S. SARA Reporting Requirements: The components of this product are NOT subject to the reporting requirements of Sections 302, 304, and 313 of Title III of the Superfund Amendments and Reauthorization Act.

U.S. SARA Hazard Categories (Section 311/312, 40 CFR 370-21): ACUTE: Yes; CHRONIC: Yes; FIRE: No; REACTIVE: No; SUDDEN RELEASE: No

U.S. TSCA Inventory Status: 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.

U.S. CERCLA Reportable Quantity (RQ): Not applicable.

U.S. Clean Air Act (CA 112r) Threshold Quantity (TQ): Not applicable.

California Safe Drinking Water and Toxic Enforcement Act (Proposition 65): The Crystalline Silica component (airborne, unbound particles of respirable size) is found on the Proposition 65 List of chemicals known to the state to cause cancer. However due to the form of the product, the Proposition 65 warning for this component is not applicable.

CANADIAN REGULATIONS:

Canadian DSL/NDSL Inventory Status: The components of this product listed by CAS# in Section 3 (MATERIAL IDENTIFICATION) are listed on the DSL Inventory.

Canadian Environmental Protection Act (CEPA) Priorities Substances Lists: Not applicable.

Canadian WHMIS (HPR-GHS) 2015 Classification and Symbols: See Section 16 in Classification and Symbols under HPR-GHS 2015.

MEXICAN REGULATIONS:

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

16. OTHER INFORMATION

U.S. ANSI STANDARD LABELING (Precautionary Statements): CAUTION! MAY CAUSE EYE, SKIN, AND RESPIRATORY TRACT IRRITATION, ESPECIALLY IF EXPOSURE IS PROLONGED. CONTAINS COMPONENTS THAT ARE SUSPECT SKIN SENSITIZERS. Avoid contact with eyes, skin, and clothing. Avoid breathing fumes, dusts, vapors or mist. Do not taste or swallow. Wash thoroughly after handling. Keep container tightly closed. Use only with adequate ventilation. Keep away from heat and flame. Wear gloves, eye protection, respiratory protection, and appropriate body protection. FIRST-AID: In case of contact, immediately flush skin and eyes with plenty of water. Remove contaminated clothing and shoes. Get medical attention if irritation develops or persists. If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. If swallowed, do not induce vomiting. Get medical attention. IN CASE OF FIRE: Use water fog, foam, dry chemical, or CO₂. IN CASE OF SPILL: Absorb spilled product with polypads or other suitable absorbing material. Place all spill residue in an appropriate container and seal. Dispose of in accordance with U.S. Federal, State, and local hazardous waste disposal regulations and those of Canada.

GLOBAL HARMONIZATION LABELING AND CLASSIFICATION: Classified in accordance with the Global Harmonization Standard.

Classification: Skin Irritation Category 2, Eye Irritation Category 2A, Skin Sensitization Category 1B, Aquatic Chronic Toxicity Category 4

Signal Word: Warning

Hazard Statements: H315: Causes skin irritation. H319: Causes serious eye irritation. H317: May cause an allergic skin reaction. H413: May cause long-lasting harmful effects to aquatic life.

Precautionary Statements:

Prevention: P261: Avoid breathing mists, sprays, fume. P264: Wash contaminated tissues after handling. P270: Do not eat, drink or smoke when using this product. P271: Use only outdoors or in a well-ventilated area. P273: Avoid release to the environment. P280: Wear protective gloves, clothing, eye protection and face protection.

Response: P302 + P352: IF ON SKIN: Wash with plenty of soap and water. P333 + P313: If skin irritation or rash occurs: Get medical advice/attention. P303 + P361 + P353: IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. P337 + P313: If eye irritation persists: Get medical advice/attention. P321: Specific treatment (remove from exposure and treat symptoms). Refer to other portions of precautionary text on this label, SDS or other product information sheets, as appropriate.

Storage: None applicable.

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

Hazard Symbols/Pictograms: GHS07

DISCLAIMER OF EXPRESSED AND IMPLIED WARRANTIES

The information presented in this Material Safety Data Sheet is presented in good faith based on data believed to be accurate as of the date this Material Safety Data Sheet was prepared. HOWEVER, NO WARRANTY OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR ANY OTHER WARRANTY IS EXPRESSED OR IS TO BE IMPLIED REGARDING THE ACCURACY OR COMPLETENESS OF THE INFORMATION PROVIDED ABOVE, THE RESULTS TO BE OBTAINED FROM THE USE OF THIS INFORMATION OR THE PRODUCT, THE SAFETY OF THIS PRODUCT, OR THE HAZARDS RELATED TO ITS USE. In no case shall the descriptions, information, data or designs provided be considered a part of our terms and conditions of sale.

All materials may present hazards and should be used with caution. Because many factors may affect processing or application/use, we recommend that you make tests to determine the suitability of a product for your particular purpose prior to use. No responsibility is assumed for any damage or injury resulting from abnormal use or from any failure to adhere to recommended practices or applicable federal, state, or local laws or regulations. The information provided above, and the product, are furnished on the condition that the person receiving them shall make their own determination as to the suitability of the product for their particular purpose and on the condition that they assume the risk of their use. In addition, no authorization is given nor implied to practice any patented invention without a license.

REFERENCES AND DATA SOURCES: Contact the supplier for information.

METHODS OF EVALUATING INFORMATION FOR THE PURPOSE OF CLASSIFICATION: Bridging principles were used to classify this product.

REVISION DETAILS: July 2018: Updated Proposition 65 statement

DATE OF PRINTING July 9, 2018