

PRODUCT DESCRIPTION

Kool Seal® Silicone Rubberized Roof and Flashing Sealant (KS0084000) is a single-component, flashing-grade silicone sealant that is permanently flexible. It is a durable, weather-resistant seal that provides excellent adhesion to a variety of substrates.

FEATURES AND BENEFITS

- Premium 100% silicone sealant
- Single component, flashing grade
- Durable, weather resistant that remains permanently flexible
- Excellent adhesion to a variety of substrates

RECOMMENDED USES

- Adheres to EPDM, aged TPO, aged PVC, metal, concrete, modified bitumen, Hypalon and other common roof substrates.
- General uses include perimeter sealing around through-roof projections, termination points, flashings, side and end laps of metal building panels, scrim edges, seams, etc.
- Can only be over coated with silicone.

ORDERING INFORMATION

Part Number	Color/Size
KS0084000-01	White (10 fl oz cartridge)

PRODUCT CHARACTERISTICS

Technology	100% Silicone
Color	White
Volume Solids	< 3% by wt
Drying Time	Tack Free: 30 minutes; Cure Time: 24 hours; Topcoat: 24 hours.
<i>Dry time is temperature, humidity and film thickness dependent</i>	

PERFORMANCE CHARACTERISTICS

Application Temp	35° F to 160° F
Service Temp	-60° F to 300° F

THEORETICAL YIELD (PER 10 OZ CARTRIDGE)

Joint Size	Lineal Feet
1/4" x 1/4"	24.8
1/4" x 3/8"	16.5
1/4" x 1/2"	12.4
1/2" x 3/8"	8.2
1/2" x 1/2"	8.2
3/8" x 1/2"	4.1

## **SURFACE PREPARATION**

**WARNING!** Removal of old paint by sanding, scraping or other means may generate dust or fumes that contain lead. Exposure to lead dust or fumes may cause brain damage or other adverse health effects, especially in children or pregnant women. Controlling exposure to lead or other hazardous substances requires the use of proper protective equipment, such as a properly fitted respirator (NIOSH approved) and proper containment and cleanup.

Surface must be power washed (minimum 2,000 psi) to remove dirt and other foreign matter that could prevent proper adhesion.

Surfaces must be completely dry prior to coating. **IMPORTANT: Where ponding water conditions persist beyond 48 hours, roof drains or other corrective measures must be installed to eliminate water buildup prior to coating the roof.** Tighten or replace loose screws. Apply Kool Seal® Storm Patch® Acrylic Rust Primer to existing rusted areas.

## **APPLICATION**

All surfaces must be clean, dry, sound and frost-free.

Apply when surface and air temperatures are between 40°F and 140°F. Do not apply to roofs when surface temperatures exceed 140°F. Surface must be completely dry prior to application.

KEEP PRODUCT FROM FREEZING.

**GENERAL INSTALLATION AND TOOLING PROCEDURE:** Cut tip of nozzle to required width of bead and puncture foil seal. Place cartridge in caulking gun, squeeze trigger to start flow of sealant and apply with steady pressure. Work sealant into joint. Smooth sealant with knife or spatula ensuring good contact between the sealant and the substrate, proper joint width-to-depth ratios and a final, finished appearance. Tooling time: 4-8 minutes.

## **CLEANUP**

100% Virgin Mineral spirits or Naptha. Follow manufacturer's instructions for safe use.

## **CAUTIONS**

- Use with adequate ventilation.
- Keep out of the reach of children.
- Use a NIOSH-approved respirator, when necessary.
- Do not take internally.
- In case of ingestion, CALL A PHYSICIAN immediately. DO NOT induce vomiting.
- If splashed in the eyes, flush thoroughly with clean water for a minimum of 15 minutes. CALL A PHYSICIAN immediately. May cause irritation to the skin. If brought into contact with the skin, wash thoroughly with soap and water. Seek medical attention if redness or irritation occurs. Avoid breathing vapors and spray mist. Reseal container after each use. Wear protective clothing, gloves and goggles. Read MSDS before using product.

**CONTAINS CRYSTALLINE SILICA.** Use only with adequate ventilation. To avoid overexposure, open windows and doors or use other means to ensure fresh air circulation during application and drying. If you experience eye watering, headaches, or dizziness, increase fresh air circulation, or wear respiratory protection (NIOSH approved) or leave the area. If adequate ventilation cannot be provided wear an approved particulate respirator (NIOSH approved). Follow respirator manufacturer's directions for respirator use.

# SAFETY DATA SHEET

KS0084000

## Section 1. Identification

**Product name** : KOOL SEAL® Tundra™ Silicone Roof and Flashing Sealant

**Product code** : KS0084000

**Other means of identification** : Not available.

**Product type** : Liquid.

**Relevant identified uses of the substance or mixture and uses advised against**

Paint or paint related material.

## Section 2. Hazards identification

**Classification of the substance or mixture** : FLAMMABLE LIQUIDS - Category 4  
SKIN CORROSION/IRRITATION - Category 2  
SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A  
SKIN SENSITIZATION - Category 1  
CARCINOGENICITY - Category 2  
TOXIC TO REPRODUCTION - Category 1B  
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3  
Percentage of the mixture consisting of ingredient(s) of unknown acute toxicity: 5.8% (oral), 6.8% (dermal), 5.8% (inhalation)

### GHS label elements

**Hazard pictograms** :



**Signal word** : Danger

**Date of issue/Date of revision** : 10/2/2021 **Date of previous issue** : 6/9/2021

KS0084000 KOOL SEAL® Tundra™ Silicone Roof and Flashing Sealant

**Version** : 8

1/14

SHW-85-NA-GHS-MX

## Section 2. Hazards identification

<b>Hazard statements</b>	: H227 - Combustible liquid. H315 - Causes skin irritation. H317 - May cause an allergic skin reaction. H319 - Causes serious eye irritation. H335 - May cause respiratory irritation. H351 - Suspected of causing cancer. H360 - May damage fertility or the unborn child.
<b><u>Precautionary statements</u></b>	
<b>General</b>	: P103 - Read label before use. P102 - Keep out of reach of children. P101 - If medical advice is needed, have product container or label at hand.
<b>Prevention</b>	: P201 - Obtain special instructions before use. P202 - Do not handle until all safety precautions have been read and understood. P280 - Wear protective gloves, protective clothing and eye or face protection. P210 - Keep away from flames and hot surfaces. No smoking. P271 - Use only outdoors or in a well-ventilated area. P261 - Avoid breathing vapor. P264 - Wash thoroughly after handling. P272 - Contaminated work clothing must not be allowed out of the workplace.
<b>Response</b>	: P308 + P313 - IF exposed or concerned: Get medical advice or attention. P304 + P340, P312 - IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor if you feel unwell. P362 + P364 - Take off contaminated clothing and wash it before reuse. P363 - Wash contaminated clothing before reuse. P302 + P352 - IF ON SKIN: Wash with plenty of water. P333 + P313 - If skin irritation or rash occurs: Get medical advice or attention. P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337 + P313 - If eye irritation persists: Get medical advice or attention.
<b>Storage</b>	: P405 - Store locked up. P403 + P233 - Store in a well-ventilated place. Keep container tightly closed. P403 + P235 - Keep cool.
<b>Disposal</b>	: P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
<b>Supplemental label elements</b>	WARNING: This product contains a chemical known to the State of California to cause cancer.  Please refer to the SDS for additional information. Keep out of reach of children. Do not transfer contents to other containers for storage.
<b>Hazards not otherwise classified</b>	: None known.

## Section 3. Composition/information on ingredients

<b>Substance/mixture</b>	: Mixture
<b>Other means of identification</b>	: Not available.
<b><u>CAS number/other identifiers</u></b>	

## Section 3. Composition/information on ingredients

Ingredient name	% by weight	CAS number
Calcium Carbonate	≥25 - ≤50	1317-65-3
Amorphous Silica	≤10	7631-86-9
Methyl Tris(methylethylketoxime)silane	≤5	22984-54-9
Vinyltri(methylethylketoxime)silane	≤1.9	2224-33-1
Aminoethylaminopropyltrimethoxysilane	≤1	1760-24-3
Octamethylcyclotetrasiloxane	≤3	556-67-2
Titanium Dioxide	≤3	13463-67-7
Fumed Amorphous Silica	≤3	112945-52-5
Dibutyltin Dilaurate	≤0.3	77-58-7

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

**There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified and hence require reporting in this section.**

Occupational exposure limits, if available, are listed in Section 8.

## Section 4. First aid measures

### Description of necessary first aid measures

- Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.
- Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
- Skin contact** : Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

### Most important symptoms/effects, acute and delayed

#### Potential acute health effects

- Eye contact** : Causes serious eye irritation.
- Inhalation** : May cause respiratory irritation.
- Skin contact** : Causes skin irritation. May cause an allergic skin reaction.
- Ingestion** : No known significant effects or critical hazards.

#### Over-exposure signs/symptoms

## Section 4. First aid measures

- Eye contact** : Adverse symptoms may include the following:  
pain or irritation  
watering  
redness
- Inhalation** : Adverse symptoms may include the following:  
respiratory tract irritation  
coughing  
reduced fetal weight  
increase in fetal deaths  
skeletal malformations
- Skin contact** : Adverse symptoms may include the following:  
irritation  
redness  
reduced fetal weight  
increase in fetal deaths  
skeletal malformations
- Ingestion** : Adverse symptoms may include the following:  
reduced fetal weight  
increase in fetal deaths  
skeletal malformations

### Indication of immediate medical attention and special treatment needed, if necessary

- Notes to physician** : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
- Specific treatments** : No specific treatment.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

## Section 5. Fire-fighting measures

### Extinguishing media

- Suitable extinguishing media** : Use dry chemical, CO<sub>2</sub>, water spray (fog) or foam.
- Unsuitable extinguishing media** : Do not use water jet.

- Specific hazards arising from the chemical** : Combustible liquid. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion.

- Hazardous thermal decomposition products** : Decomposition products may include the following materials:  
carbon dioxide  
carbon monoxide  
nitrogen oxides  
metal oxide/oxides

- Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

## Section 5. Fire-fighting measures

**Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

## Section 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
- For emergency responders** : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

**Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

### Methods and materials for containment and cleaning up

- Small spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
- Large spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

## Section 7. Handling and storage

### Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapor or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Empty containers retain product residue and can be hazardous. Do not reuse container.
- Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

## Section 7. Handling and storage

**Conditions for safe storage, including any incompatibilities** : Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

## Section 8. Exposure controls/personal protection

### Control parameters

#### Occupational exposure limits (OSHA United States)

Ingredient name	CAS #	Exposure limits
Calcium Carbonate	1317-65-3	<b>OSHA PEL (United States, 5/2018).</b> TWA: 5 mg/m <sup>3</sup> 8 hours. Form: Respirable fraction TWA: 15 mg/m <sup>3</sup> 8 hours. Form: Total dust <b>NIOSH REL (United States, 10/2020).</b> TWA: 5 mg/m <sup>3</sup> 10 hours. Form: Respirable fraction TWA: 10 mg/m <sup>3</sup> 10 hours. Form: Total dust
Amorphous Silica	7631-86-9	<b>NIOSH REL (United States, 10/2020).</b> TWA: 6 mg/m <sup>3</sup> 10 hours.
Methyl Tris(methylethylketoxime)silane	22984-54-9	None.
Vinyltri(methylethylketoxime)silane	2224-33-1	None.
Aminoethylaminopropyltrimethoxysilane	1760-24-3	None.
Octamethylcyclotetrasiloxane	556-67-2	<b>OARS WEEL (United States, 1/2021).</b> TWA: 10 ppm 8 hours.
Titanium Dioxide	13463-67-7	<b>ACGIH TLV (United States, 1/2021).</b> TWA: 10 mg/m <sup>3</sup> 8 hours. <b>OSHA PEL (United States, 5/2018).</b> TWA: 15 mg/m <sup>3</sup> 8 hours. Form: Total dust <b>NIOSH REL (United States, 10/2020).</b> TWA: 6 mg/m <sup>3</sup> 10 hours.
Fumed Amorphous Silica	112945-52-5	<b>ACGIH TLV (United States, 1/2021).</b> <b>Absorbed through skin.</b> TWA: 0.1 mg/m <sup>3</sup> , (as Sn) 8 hours. STEL: 0.2 mg/m <sup>3</sup> , (as Sn) 15 minutes. <b>NIOSH REL (United States, 10/2020).</b> <b>Absorbed through skin.</b> TWA: 0.1 mg/m <sup>3</sup> , (as Sn) 10 hours.
Dibutyltin Dilaurate	77-58-7	<b>OSHA PEL (United States, 5/2018).</b> TWA: 0.1 mg/m <sup>3</sup> , (as Sn) 8 hours.

#### Occupational exposure limits (Canada)

Ingredient name	CAS #	Exposure limits
Octamethylcyclotetrasiloxane	556-67-2	<b>OARS WEEL (United States, 1/2021).</b> TWA: 10 ppm 8 hours.
Titanium dioxide	13463-67-7	<b>CA British Columbia Provincial (Canada, 1/2021).</b> TWA: 10 mg/m <sup>3</sup> 8 hours. Form: Total dust TWA: 3 mg/m <sup>3</sup> 8 hours. Form: respirable fraction <b>CA Quebec Provincial (Canada, 7/2019).</b>



## Section 8. Exposure controls/personal protection

TWAEV: 10 mg/m<sup>3</sup> 8 hours. Form: Total dust.  
**CA Alberta Provincial (Canada, 6/2018).**  
 8 hrs OEL: 10 mg/m<sup>3</sup> 8 hours.  
**CA Ontario Provincial (Canada, 6/2019).**  
 TWA: 10 mg/m<sup>3</sup> 8 hours.  
**CA Saskatchewan Provincial (Canada, 7/2013).**  
 STEL: 20 mg/m<sup>3</sup> 15 minutes.  
 TWA: 10 mg/m<sup>3</sup> 8 hours.

### Occupational exposure limits (Mexico)

Ingredient name	CAS #	Exposure limits
Dibutyltin Dilaurate	77-58-7	<b>NOM-010-STPS-2014 (Mexico, 4/2016).</b> <b>Absorbed through skin.</b> TWA: 0.1 mg/m <sup>3</sup> , (as Sn) 8 hours. STEL: 0.2 mg/m <sup>3</sup> , (as Sn) 15 minutes.

**Appropriate engineering controls** : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

**Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

### Individual protection measures

**Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

**Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

### Skin protection

**Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

**Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

**Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

**Respiratory protection** : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

## Section 9. Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

### Appearance

Physical state	: Liquid.
Color	: Not available.
Odor	: Not available.
Odor threshold	: Not available.
pH	: Not applicable.
Melting point/freezing point	: Not available.
Boiling point, initial boiling point, and boiling range	: 115°C (239°F)
Flash point	: Closed cup: 90°C (194°F) [Pensky-Martens Closed Cup]
Evaporation rate	: Not available.
Flammability	: Not available.
Lower and upper explosion limit/flammability limit	: Lower: 0.75% Upper: 7.4%
Vapor pressure	: Not available.
Relative vapor density	: Not available.
Relative density	: 1.03
Solubility	: Not available.
Partition coefficient: n-octanol/water	: Not applicable.
Auto-ignition temperature	: Not available.
Decomposition temperature	: Not available.
Viscosity	: Kinematic (40°C (104°F)): >20.5 mm <sup>2</sup> /s (>20.5 cSt)
Molecular weight	: Not applicable.

### Aerosol product

## Section 10. Stability and reactivity

Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	: The product is stable.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.
Incompatible materials	: Reactive or incompatible with the following materials: oxidizing materials
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## Section 11. Toxicological information

### Information on toxicological effects

#### Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Aminoethylaminopropyltrimethoxysilane	LD50 Oral	Rat	2413 mg/kg	-
Octamethylcyclotetrasiloxane	LC50 Inhalation Vapor	Rat	36 g/m <sup>3</sup>	4 hours
	LD50 Dermal	Rat	1770 mg/kg	-
Fumed Amorphous Silica	LD50 Oral	Rat	1540 mg/kg	-
Dibutyltin Dilaurate	LD50 Oral	Rat	3160 mg/kg	-
	LD50 Oral	Rat	2071 mg/kg	-

#### Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Amorphous Silica	Eyes - Mild irritant	Rabbit	-	24 hours 25 mg	-
Aminoethylaminopropyltrimethoxysilane	Eyes - Severe irritant	Rabbit	-	15 mg	-
	Skin - Mild irritant	Rabbit	-	500 mg	-
Octamethylcyclotetrasiloxane	Eyes - Mild irritant	Rabbit	-	24 hours 500 mg	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 mg	-
Titanium Dioxide	Skin - Mild irritant	Human	-	72 hours 300 ug l	-
Dibutyltin Dilaurate	Eyes - Moderate irritant	Rabbit	-	24 hours 100 mg	-
	Skin - Severe irritant	Rabbit	-	500 mg	-

#### Sensitization

Not available.

#### Mutagenicity

Not available.

#### Carcinogenicity

Not available.

#### Classification

Product/ingredient name	OSHA	IARC	NTP
Amorphous Silica	-	3	-
Titanium Dioxide	-	2B	-
Fumed Amorphous Silica	-	3	-

#### Reproductive toxicity

Not available.

#### Teratogenicity

Not available.

#### Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
Calcium Carbonate	Category 3	-	Respiratory tract irritation
Dibutyltin Dilaurate	Category 1	-	-

#### Specific target organ toxicity (repeated exposure)

## Section 11. Toxicological information

Name	Category	Route of exposure	Target organs
Dibutyltin Dilaurate	Category 1	oral	-

### Aspiration hazard

Not available.

**Information on the likely routes of exposure** : Not available.

### Potential acute health effects

**Eye contact** : Causes serious eye irritation.  
**Inhalation** : May cause respiratory irritation.  
**Skin contact** : Causes skin irritation. May cause an allergic skin reaction.  
**Ingestion** : No known significant effects or critical hazards.

### Symptoms related to the physical, chemical and toxicological characteristics

**Eye contact** : Adverse symptoms may include the following:  
pain or irritation  
watering  
redness

**Inhalation** : Adverse symptoms may include the following:  
respiratory tract irritation  
coughing  
reduced fetal weight  
increase in fetal deaths  
skeletal malformations

**Skin contact** : Adverse symptoms may include the following:  
irritation  
redness  
reduced fetal weight  
increase in fetal deaths  
skeletal malformations

**Ingestion** : Adverse symptoms may include the following:  
reduced fetal weight  
increase in fetal deaths  
skeletal malformations

### Delayed and immediate effects and also chronic effects from short and long term exposure

#### Short term exposure

**Potential immediate effects** : Not available.

**Potential delayed effects** : Not available.

#### Long term exposure

**Potential immediate effects** : Not available.

**Potential delayed effects** : Not available.

### Potential chronic health effects

Not available.

**General** : Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.

## Section 11. Toxicological information

<b>Carcinogenicity</b>	: Suspected of causing cancer. Risk of cancer depends on duration and level of exposure.
<b>Mutagenicity</b>	: No known significant effects or critical hazards.
<b>Teratogenicity</b>	: May damage the unborn child.
<b>Developmental effects</b>	: No known significant effects or critical hazards.
<b>Fertility effects</b>	: May damage fertility.

### Numerical measures of toxicity

#### Acute toxicity estimates

Route	ATE value
Oral	94005.06 mg/kg
Dermal	177000 mg/kg
Inhalation (vapors)	1100 mg/l

## Section 12. Ecological information

### Toxicity

Product/ingredient name	Result	Species	Exposure
Octamethylcyclotetrasiloxane	Acute LC50 0.204 to 3.483 mg/l Fresh water Chronic NOEC 7.9 µg/l Fresh water Chronic NOEC 4.4 µg/l Fresh water	Fish - Leuciscus idus ssp. melanotus Daphnia - Daphnia magna Fish - Oncorhynchus mykiss - Egg	96 hours 21 days 93 days
Titanium Dioxide Dibutyltin Dilaurate	Acute LC50 >1000000 µg/l Marine water Chronic EC10 >2 mg/l Fresh water	Fish - Fundulus heteroclitus Algae - Desmodesmus subspicatus	96 hours 96 hours

### Persistence and degradability

Not available.

### Bioaccumulative potential

Product/ingredient name	LogP <sub>ow</sub>	BCF	Potential
Octamethylcyclotetrasiloxane	-	13400	high
Dibutyltin Dilaurate	-	2.91	low

### Mobility in soil

<b>Soil/water partition coefficient (K<sub>oc</sub>)</b>	: Not available.
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<b>Other adverse effects</b>	: No known significant effects or critical hazards.
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## Section 13. Disposal considerations

**Disposal methods** : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

## Section 14. Transport information

	<b>DOT Classification</b>	<b>TDG Classification</b>	<b>Mexico Classification</b>	<b>IATA</b>	<b>IMDG</b>
<b>UN number</b>	Not regulated.	Not regulated.	Not regulated.	Not regulated.	Not regulated.
<b>UN proper shipping name</b>	-	-	-	-	-
<b>Transport hazard class(es)</b>	-	-	-	-	-
<b>Packing group</b>	-	-	-	-	-
<b>Environmental hazards</b>	No.	No.	No.	No.	No.
<b>Additional information</b>	-		-	-	-

**Special precautions for user** : Multi-modal shipping descriptions are provided for informational purposes and do not consider container sizes. The presence of a shipping description for a particular mode of transport (sea, air, etc.), does not indicate that the product is packaged suitably for that mode of transport. All packaging must be reviewed for suitability prior to shipment, and compliance with the applicable regulations is the sole responsibility of the person offering the product for transport. People loading and unloading dangerous goods must be trained on all of the risks deriving from the substances and on all actions in case of emergency situations.

**Transport in bulk according  
to IMO instruments** : Not available.

**Proper shipping name** : Not available.

## Section 15. Regulatory information

### [International regulations](#)

#### International lists

: **Australia inventory (AIIIC)**: Not determined.  
**China inventory (IECSC)**: Not determined.  
**Japan inventory (CSCL)**: Not determined.  
**Japan inventory (ISHL)**: Not determined.  
**Korea inventory (KECI)**: Not determined.  
**New Zealand Inventory of Chemicals (NZIoC)**: Not determined.  
**Philippines inventory (PICCS)**: Not determined.  
**Taiwan Chemical Substances Inventory (TCSI)**: Not determined.  
**Thailand inventory**: Not determined.  
**Turkey inventory**: Not determined.  
**Vietnam inventory**: Not determined.

## Section 16. Other information

### [Hazardous Material Information System \(U.S.A.\)](#)

Health	*	3
Flammability		2
Physical hazards		0

The customer is responsible for determining the PPE code for this material. For more information on HMIS® Personal Protective Equipment (PPE) codes, consult the HMIS® Implementation Manual.

**Caution:** HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings and the associated label are not required on SDSs or products leaving a facility under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered trademark and service mark of the American Coatings Association, Inc.

#### [Procedure used to derive the classification](#)

Classification	Justification
FLAMMABLE LIQUIDS - Category 4 SKIN CORROSION/IRRITATION - Category 2 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A SKIN SENSITIZATION - Category 1 CARCINOGENICITY - Category 2 TOXIC TO REPRODUCTION - Category 1B SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3	On basis of test data Calculation method Calculation method Calculation method Calculation method Calculation method Calculation method

### [History](#)

**Date of printing** : 10/2/2021

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**Version** : 8

**Key to abbreviations** : ATE = Acute Toxicity Estimate  
BCF = Bioconcentration Factor  
GHS = Globally Harmonized System of Classification and Labelling of Chemicals  
IATA = International Air Transport Association  
IBC = Intermediate Bulk Container  
IMDG = International Maritime Dangerous Goods  
LogPow = logarithm of the octanol/water partition coefficient  
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)

## Section 16. Other information

N/A = Not available  
SGG = Segregation Group  
UN = United Nations

Indicates information that has changed from previously issued version.

### Notice to reader

It is recommended that each customer or recipient of this Safety Data Sheet (SDS) study it carefully and consult resources, as necessary or appropriate, to become aware of and understand the data contained in this SDS and any hazards associated with the product. This information is provided in good faith and believed to be accurate as of the effective date herein. However, no warranty, express or implied, is given. The information presented here applies only to the product as shipped. The addition of any material can change the composition, hazards and risks of the product. Products shall not be repackaged, modified, or tinted except as specifically instructed by the manufacturer, including but not limited to the incorporation of products not specified by the manufacturer, or the use or addition of products in proportions not specified by the manufacturer. Regulatory requirements are subject to change and may differ between various locations and jurisdictions. The customer/buyer/user is responsible to ensure that his activities comply with all country, federal, state, provincial or local laws. The conditions for use of the product are not under the control of the manufacturer; the customer/buyer/user is responsible to determine the conditions necessary for the safe use of this product. The customer/buyer/user should not use the product for any purpose other than the purpose shown in the applicable section of this SDS without first referring to the supplier and obtaining written handling instructions. Due to the proliferation of sources for information such as manufacturer-specific SDS, the manufacturer cannot be responsible for SDSs obtained from any other source.