

Siloxane Final Seal
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Version 1.1

**TCC Materials** 

2025 Centre Pointe Boulevard Mendota Heights, MN 55120-1221 **Emergency Telephone Number:** 

800-424-9300

Information Telephone Number

651-905-8137

Revision Date August 2023

### Section 1: Product Identification

Product Type: Concrete Sealer

**Product Name:** 

Siloxane Final Seal

### Section 2: Hazard Identification

### **Hazard Risk Classification**

This product has been evaluated according to GHS and 29CFR1910.1200, Appendix A, and classified as:

Aspiration Hazard, hazard category 1

Carcinogen, hazard category 2 (because it may contain less than 8% of ethylbenzene, a suspect cancer-causing agent)

Eye irritant, hazard category 2

Skin irritant, hazard category 2

Flammable liquid, Hazard Category 3

Specific target organ toxicity – single exposure, hazard category 3 Irritation, narcotic effects

Specific target organ toxicity, repeated exposure, hazard category 3

### **Label Elements:**

**Hazard Pictograms:** 







Signal Word: Danger.

### **Hazard Statements:**

May be fatal if swallowed and enters airways.

Flammable liquid and vapor.

Causes eye irritation.

Causes skin irritation

May cause respiratory irritation

May cause drowsiness or dizziness.

May cause damage to nervous system through prolonged or repeated exposure.

## **Precautionary Statements:**



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### General

Read label before use. Keep out of reach of children. If medical advice is needed, have product container at hand.

#### Prevention

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

Wear protective gloves/eye protection/face protection.

Keep away from heat/sparks/open flames/hot surfaces— No smoking.

Keep container tightly closed.

Ground/bond container and receiving equipment.

Use explosion-proof electrical/ventilating/ lighting equipment where flammable vapors can be generated.

Use only non-sparking tools.

Take precautionary measures against static discharge.

Avoid breathing vapors.

Use only outdoors or in a well-ventilated area.

Wash hands and other exposed skin thoroughly after handling.

### Response

If exposed or concerned, if eye irritation or skin irritation occurs: Get medical attention

**If in eyes:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

**If on skin (or hair):** Take off immediately all contaminated clothing. Rinse skin with plenty of water/shower. Wash contaminated clothing before reuse.

**If inhaled:** Remove person to fresh air and keep comfortable for breathing. Call a poison center or doctor if you feel unwell.

**If swallowed:** Immediately call a poison center or doctor. Do NOT induce vomiting

**In case of fire:** Use a Class B fire extinguisher (such as carbon dioxide, dry chemical).

### Storage:

Store locked up, in a well-ventilated place. Keep cool.

Keep container tightly closed.

#### Disposal:

Dispose of contents/container in accordance with all local, state, national, and international regulations.

### **Supplemental Label Elements:**

### **Delayed Effects from Long Term Exposure:**

Contains solvents which can cause permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents can be harmful or fatal.

**WARNING:** This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.



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### Hazards not otherwise classified:

None known.

# **Section 3: Hazardous Ingredients/Composition**

Ingredient	Typical Percentage	CAS#
Solvent naphtha, light aromatic	55-75%	64742-95-6
1,2,4-Trimethylbenzene	4-10%	95-63-6
Ethylbenzene	<0.5%	100-41-4
Xylene	20-35%	1330-20-7
Polysiloxane	5-15%	nonhazardous

Solvent naphtha, light aromatic may contain varying amounts of 1,2,4-trimethylbenzene and other C8-C12 hydrocarbons.

### **Section 4: First Aid Measures**

### **Eye contact:**

Hold eyelids apart and flush eyes with plenty of water. At least fifteen minutes of flushing is recommended for any chemical contact. Check for and remove any contact lenses. If any irritation persists, get medical attention.

#### **Skin Contact:**

Remove contaminated clothing and shoes. Wash off with soap and plenty of water. Wash contaminated clothing and clean contaminated shoes before reuse.

### Inhalation:

Move to fresh air. If breathing difficulty develops, provide oxygen or give artificial respiration and seek medical attention. Never give anything by mouth to an unconscious person.

## Ingestion:

Get medical attention (check with the Poison Control Center or a doctor). Do **not** induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. 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 tightly clothing such as collar, tie, belt, or waistband.

### Symptoms of overexposure:

## Eye:

Eye irritation or pain, watering, redness could develop from direct contact.

### Skin:

Can dry skin and cause skin cracking. May cause irritation and/or redness.

<sup>\*</sup>Specific chemical identities and concentrations withheld as trade secret. They are available upon request to health professionals, employees and their designated representatives in accord with 29CFR1910.1200(i).



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### Inhaled:

High vapor concentrations will be irritating to the nose and throat. Breathing large amounts can cause headaches, dizziness, weakness, irritability, coughing, nausea (narcotic effects), and/or unconsciousness. May cause central nervous system depression.

## Ingestion:

If swallowed/vomited, liquid can enter the lungs (be aspirated) and cause chemical pneumonia, which can be fatal.

**Note to physician:** Treat according to symptoms. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled. No known specific antidote.

## **Section 5: Fire Fighting Measures**

**Suitable fire extinguishing media:** Use Class B extinguisher (dry chemical, CO2), water spray, water fog, or foam.

**Unsuitable fire extinguishing media:** Do not use a direct stream of water.

**Unsuitable fire extinguishing media:** Do not use water jet.

**Specific hazards arising from the chemical:** Flammable liquid and vapor. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. The vapor/gas is heavier than air and will spread along the ground. Vapors may accumulate in low or confined areas or travel across ground in a considerable distance to ignition sources and flash back. Runoff to sewer may create fire or explosion hazard.

**Hazardous combustion products:** carbon monoxide, carbon dioxide, acrylic monomers.

**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. Cool fire-exposed containers with water spray to prevent container weakening and rupture. Prevent runoff from entering sewers, streams, water sources.

**Special protective equipment for fire-fighters:** Firefighters should wear personal protective equipment suitable for petroleum fuel fire, including self-contained breathing apparatus (SCBA) with a full face-piece operated in a positive pressure mode.

### **Section 6: Accidental Release Measures**



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## Personal precautions, protective equipment and emergency procedures:

**General precautions**: Control sources of ignition. Stop leak if you can do so safely. Contain spill. Dike drains to prevent entry into sewers, waterways. Soak up with absorbent material. Use nonsparking tools to clean up spilled material. Floor may be slightly slippery; use any suitable cleaner.

**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 area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate protective equipment.

**For emergency responders:** If specialized clothing is required to deal with the spillage, refer to information in Section 8 on suitable and non-suitable materials.

**Environmental precautions:** Avoid dispersal of spilled material and runoff 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 you can do so safely. Move containers from spill area. Use non-sparking tools and explosion-proof equipment. Absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of container via a licensed waste disposal contractor.

Large spill: Stop leak if you can do so safely. Move containers from spill area. Use non-sparking tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers or confined areas. 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 container via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product.

## **Section 7: Handling and Storage**

### **Precautions for Safe Handling:**

**Protective measures:** Put on appropriate personal protective equipment (see Section 8). Avoid exposure. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Use in well-ventilated area. Do not breathe vapor or mist. Do not swallow. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or a properly labeled approved alternative made from a compatible material. Keep container tightly closed when not in use. Store



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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. Ground and bond containers when transferring materials, to control static electricity. Do not cut or weld on empty containers. Empty containers can contain explosive vapors. Do not reuse container.

**General hygiene advice:** Eating, drinking, and smoking should be prohibited in areas where this material is handled, stored, and processed. Wash hands and face after use, especially before eating, drinking, and smoking. Remove contaminated clothing and protective equipment before entering eating areas. Refer to Section 8 for additional information on hygiene measures.

Conditions for safe storage including any incompatibilities: Store in accordance with local regulations. Store in a segregated and approved area. Store in original container away from heat, fire, sources of ignition, direct sunlight, and away from incompatible materials and oxidizing materials (refer to Section 10). Store away from food and drink. Store locked up. Keep container closed when not in use. Containers that have been opened must be tightly closed and resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

## **Section 8: Exposure Controls/Personal Protection**

Occupational Exposure Limits:

	OSHA PEL	OSHA 1989 PEL <sup>1</sup>	ACGIH TLV	NIOSH REL	
Solvent naphtha,	Not	Not	100 mg/m <sup>3</sup>	Not	
light aromatic <sup>2</sup>	established	established		established	
Ethylbenzene	100 ppm	100 ppm TWA	20 ppm	100 ppm	
		125 ppm STEL			
Xylene	100 ppm	100 ppm TWA	100 ppm TWA	100 ppm	
		150 ppm STEL	150 ppm STEL		
Polysiloxane	None established				

<sup>&</sup>lt;sup>1</sup>For states that adopted the 1989 PEL revisions (Minnesota, Oregon, Washington, California

### **Engineering Controls:**

Sufficient to maintain vapors below recommended limits. General ventilation is usually adequate for typical product use.

### Personal protective measures and equipment

<sup>&</sup>lt;sup>2</sup>ACGIH TLV: Group Guidance Value recommended for certain refined hydrocarbon solvent vapor mixtures, based on C9-C15 aromatics, Appendix H.



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**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. Remove potentially contaminated clothing and wash before reusing.

**Eye/face protection:** Safety glasses with side shields are recommended to ensure against any eye contact.

**Hand protection:** Chemical-resistant, impervious gloves should be worn when handling chemical products, particularly for prolonged contact. Check gloves during use that the gloves are still retaining their protective properties.

**Skin protection:** Appropriate footwear and any additional skin protection measures should be selected based on the tasks performed and risks involved. Body protection: Personal protective equipment for the body should be selected based on the task being performed and risks involved. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the most protection from static discharges, clothing should include anti-static overalls, boots, and gloves.

**Respiratory protection:** If concentrations cannot be maintained below exposure limits with ventilation alone, use cartridge respirator with organic vapor cartridges. Choose a respirator with an appropriate assigned protection factor for the expected concentrations.

### **Section 9: Physical and Chemical Properties**

Appearance: Clear liquid.

**Odor:** Hydrocarbon odor

Flash point: >80°F.

Flammable limits: Not determined for product. 1% - 7% for solvent

naphtha

Boiling Point:

Melting point:

Autoignition temperature:

Decomposition temperature:

Viscosity:

Not determined.

Not determined.

Not determined.

Not determined.

Specific Gravity: 0.885

**Density:** 7.39 pounds per gallon

Solubility in water: Not miscible.

Partition coefficient (Kow): Not determined.

**Vapor pressure:** Not determined for product. 2 mmHg for solvent

naphtha.

**Vapor density:** Not determined for product. 4.3 for solvent naphtha

(air = 1)



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**Evaporation Rate:** Not determined.

**Evaporation rate (butyl acetate = 1):** <1 **VOC%:** >90%

## Section 10: Stability and Reactivity

**Reactivity:** No specific test data related to reactivity is available for this product or its ingredients.

Stability: 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, including heat, sparks, or flame. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose containers to heat or sources of ignition. Do not allow vapor to accumulate in low or confined areas.

**Incompatibility**: strong oxidizing agents, strong acids or alkalis

Hazardous polymerization: will not occur

**Hazardous decomposition products:** none expected in normal use.

## **Section 11: Toxicological Information**

Toxicity testing has not been done on product as a whole.

No ingredient is considered respiratory or skin sensitizers.

No ingredient is listed as a carcinogen by OSHA, National Toxicology Report on Carcinogens, or the International Agency for Research on Cancer (IARC)

Ethylbenzene, a component of xylene, is listed as a Group 2B carcinogen by IARC (*Possibly carcinogenic to humans*, with sufficient evidence in experimental animals, inadequate evidence in humans) and A3 (confirmed animal carcinogen with unknown relevance to humans) by ACGIH

Solvent naphtha (light aromatic) is classified as:

Aspiration hazard 1

Flammable Liquid 2

STOT SE 3 (central nervous system toxicity by inhalation) – respiratory irritant

Eye irritant 2B

Skin irritant 2

Primary routes of entry: inhalation, skin contact, skin absorption, eye contact, ingestion.



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Rat LD50, oral: 8400 mg/kg (causing tremor, somnolence, respiratory changes)

Considered mildly to moderately irritating to skin, minimally irritating to eye.

Potential to irritate respiratory tract.

Repeated dose toxicity:

NOEAL, rat, 3 month inhalation study: 6500 mg/m<sup>3</sup>

NOAEL, rat, 12 month inhalation study: 373 ppm (1830 mg/m³) for commercial blend Reproductive toxicity:

Rats, LOAEC, F3 generational study: 495 ppm (2430 mg/m<sup>3</sup>)

Ethylbenzene: Primarily hazard from inhalation. Irritating to eyes, skin, respiratory tract.

GHS classification

Carcinogen, hazard category 2

Aspiration hazard category 1

Flammable liquid, hazard category 2

Skin irritation, hazard category 2

Eye irritation, hazard category 2A

STOT-SE hazard category 3 (respiratory irritation, narcotic effects)

Specific target organ toxicity, repeated exposure – hazard category 2

(nervous system effects)

Hazard to the aquatic environment (acute) – hazard category 2

Can affect central nervous system, kidney, and liver

Odor is not a good guide to overexposure.

LD50, rat, oral: 3.5 – 4.7 g/kg

LC50, rat, inhalation, 4 hours; 4000 ppm

NOAEL, mice, 2 years repeated dose: 75 – 250 ppm

### Xylene:

### GHS Classification:

Flammable liquid, hazard category 3

Skin irritation, hazard category 2

Eye irritation, hazard category 2A

STOT-SE hazard category 3 (respiratory irritation, narcotic effects)

Aspiration hazard category 1

Specific target organ toxicity, repeated exposure – hazard category 2

(nervous system effects)

Hazard to the aquatic environment (acute) - hazard category 2

TCLo, human inhalation: 200 ppm

LCLo, human inhalation: 6125 ppm/12 hours

Rat, inhalation, 8 hr/day/6 months, NOEL: 346 ppm. LOEL: 923 ppm.

Can affect central nervous system, kidney at high levels. At high levels, may

cause cardiac arrythmia

Causes central nervous system depression.

Irritating to skin and eyes Odor threshold: 0.2-2 ppm



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## **Section 12: Ecological Information**

Product as a whole has not been tested.

**Ecotoxicity**: Solvent naphtha is considered toxic to aquatic organisms (GHS acute aquatic hazard category 2).

### Persistence and degradability

Solvent naphtha is considered readily biodegradable.

### Mobility in soil:

Not tested.

Bioaccumulation: based on ingredients, not likely to bioaccumulate

Toxicity:

Solvent naphtha, reported range for fish (LL50, LC50) and invertebrates (EL50,

EC50): 3.5-9.2 mg/L

## **Section 13: Disposal Considerations**

# **Disposal methods:**

As provided, RCRA-regulated as D001 (ignitable), F003

Do not dump in sewer or on the ground.

Dispose of in accordance with federal, state, and local regulations.

Dried material may usually be disposed of as industrial solid water.

Dispose of surplus and non-recyclable products via a licensed waste disposal contractor.

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. This material and its container must be disposed of in a safe way.

## **Section 14: Transportation**

**Proper shipping name:** Coating solution (includes surface treatments or coatings used for industrial or other purposes such as vehicle undercoating, drum or barrel lining)

UN Number: UN1139

Hazard class: 3 Packing group: III



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## **Section 15: Regulatory Information**

This product does not contain any extremely hazardous substances regulated under SARA 302, 303 or CERCLA.

Ethylbenzene is on California's List of Chemicals known to the state of California to cause cancer or reproductive effects (Proposition 65).

Chemicals on the New Jersey Right to Know Hazardous Substance List: ethylbenzene, and xylene

Hazardous air pollutants:

Xylene

Ethylbenzene

SARA 311/312 Hazard Categories

Acute health hazard Yes Chronic Health Hazard Yes

Fire hazard yes

Sudden release of pressure hazard No

Reactive Hazard No.

## **Section 16: Other Information**

## Hazardous Material Information System (USA)

HMIS® Rating: Health: 2 Fire: 3 Reactivity: 0

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

NFPA 704 Rating: Health: 2 Fire: 3 Instability: 0

Additional information on the product is available at: www.tccmaterials.com

Date and Revision: 03 August 2023, Revision 1

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