

Safety Data Sheet

May be used to comply with OSHA's Hazard Communication Standard 29 CFR 1910.1200. Standard must be consulted for specific requirements. IDENTITY (As used on Label and List)

U.S. Department of Labor

Occupational Safety and Health Administration (Non-Mandatory Form) Form Approved OMB No. 1218-0072



Precast Concrete

Note: Blank spaces are not permitted. If any item is not applicable, or no information is available, the space must be marked to indicate that.

Section I: Identification

1.1 Product Identifier

Product Identifier:	Precast Concrete Trenches and Utility Products
Other Identifiers:	Precast Vaults Precast Pads Precast Boxes
Chemical Name:	Calcium compounds, calcium silicate, polycarboxylate ether and other compounds containing iron and aluminum make up the majority of this product.
1.2 Recommended Use Of Chemical And Restrictions On Use	
Relevant Uses:	Containment and protection of underground utilities.
1.3 Details Of The Supplier Of The Safety Data Sheet	
Name:	Trenwa, Inc.
Address:	1419 Alexandria Pike Fort Thomas, KY 41075
Telephone Number:	(859)-781-0831
1.4 Emergency Telephone Number	
Emergency Telephone Number:	1-800-222-1222 (Poison Control Center)

Section 2 - Hazards Identification

2.1 Classification Of The Chemical According To OSHA HAZCOM 2012

- Skin Irritant- Category 2
- Eye Irritant- Category 2A
- Skin Sensitant- Category 1
- Carcinogen- Category 1A
- Specific Target Organ Toxicity- Single Exposure Category 3
- Specific Target Organ Toxicity- Repeated Exposure Category 1

2.2 Label Elements According to OSHA HAZCOM 2012

Hazard Pictogram:



Signal Word:

Danger

Hazard Statement:

Causes skin irritation. Causes serious eye irritation. May cause an allergic skin reaction. Respirable dust may contain crystalline silica, known to cause cancer. May cause respiratory irritation. Causes damage to lungs through prolonged or repeated exposure.

Prevention:

Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling. Contaminated work clothing must not be allowed out of the workplace. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves/protective clothing/eye protection/face protection. Use only outdoors or in a well-ventilated area. Do not breathe dust, mist or fumes.

Response:

If exposed or concerned: Get medical advice/attention. If on skin: Wash with plenty of water. Take off contaminated clothing and wash it before reuse. If skin irritation or rash occurs: Get medical advice/attention. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. If inhaled: Remove person to fresh air and keep comfortable for breathing.

Section 3 - Composition/Information on Ingredients

3.1 Mixtures

Substance/mixture:	Concrete Mixtures
Chemical name:	Calcium compounds; calcium silicates and calcium oxides make up the majority of this product - calcium compounds may contain small amounts of iron or aluminum, polycarboxylate admixture

Ingredient Name	% Content	CAS Number

Portland Cement	10 - 30	65997-15-1
Water	5 - 20	7732-18-5
Silica, crystalline; Quartz	25 - 50	14808-60-7
Calcium Carbonate	20 - 45	1317-65-3
Polycarboxylate Superplasticizer	< 1	936626-0-0

Section 4 - First Aid Measures

4.1 Description of First Aid Measures

Eye:	In case on contac. immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Remove contact lenses, if worn. If eye irritation persists, seek medical attention.
Skin:	If irritation occurs wash thoroughly with lukewarm, gently flowing water and non-abrasive pH neutral soap. Seek medical attention for rashes, burns, irritation, dermatitis and prolonged unprotected exposure to wet cement and cement mixes.
Inhalation:	If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. If coughing symptoms persist, seek medical attention.
Ingestion:	If swallowed do NOT induce vomiting unless directed to do so by medical personnel. Seek medical attention immediately. Have victim drink 20 to 240mL of water. Stop giving water if the victim feels nauseous.

4.2 Most Important Symptoms and Side Effects, Both Acute and Delayed

Eye:	Causes serious eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with possible redness and swelling
Skin:	Causes skin irritation. Wear gloves when handling product to avoid drying and mechanical abrasion of the skin. May cause sensitization by skin contact. May cause allergic reactions to skin.
Inhalation:	Dust may cause respiratory tract irritation.
Ingestion:	Not expected to be a significant route of entry. May cause burns to mouth, throat and stomach.

4.3 Indication Of Any Immediate Medical Attention And Special Treatments Needs

Note To Physicians:	Symptoms may not appear immediately.
Specific Treatments:	In case of accident or physical discomfort, seek medical advice immediately (shown on label or SDS)

Section 5 - Fire Fighting Measures

5.1 Flammability

Flammability:	Not flammable by WHMIS/OSHA/NOM-018-STPS-2000 Criteria
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5.2 Extinguishing Media

Suitable Extinguishing Media:	Treat for surrounding material.
Unsuitable Extinguishing Media:	None

5.3 Specific Hazards Arising From The Product

Products of Combustion:	May include, and are not limited to, the following materials: carbon dioxide, carbon monoxide, sulfur oxides and metal oxides
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Explosion Data:	No specific fire or explosion hazard
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5.4 Specific Protective Equipment And Precautions For Fire Fighters

Positive pressure self contained breathing apparatus (SCBA) and structural firefighters' protective clothing will provide adequate protections.

Section 6 - Accidental Release Data

6.1 Personal Precautions, Protective Equipment and Emergency Procedures

For Non-Emergency Personnel:	Evacuate area, if necessary. Contact emergency personnel, if needed. Do not breath dust if generated. Stay upwind.
For Emergency Personnel:	Evacuate surrounding areas if necessary. Keep unnecessary and unprotected personnel from entering. Do not breath dust if generated. Provide adequate ventilation.
Environmental Precautions:	Avoid release to the environment

6.2 Methods And Materials For Containment And Cleaning Up

Methods For Containment:	Pick up large pieces, then place in a suitable container. Do not flush to sewer to allow to enter waterways. Use appropriate Personal Protective Equipment (PPE)
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Methods For Clean Up

Vacuum or sweep material and place in a disposal container. Use wet methods, if appropriate, to reduce the generation of dust. Provide ventilation if dust is generated.

Section 7 - Handling And Storage**7.1 Precautions for Safe Handling**

Handling: Avoid contact with skin and eyes. Good Housekeeping is important to prevent the accumulation of dust. Use wet methods, if appropriate, to reduce the generation of dust. The use of compressed air for cleaning clothes, equipment is not recommended. Handle with care. When using do not eat or drink (see section 8)

General Hygiene Advice: Launder contaminated clothing before reuse. Wash hands before eating, drinking or smoking.

7.2 Conditions For Safe Storage, Including Any Incompatibilities

Storage Avoid any dust buildup by frequently cleaning and ensuring suitable construction of the storage area.

Section 8 - Exposure Controls/Personal Protection**8.1 Control Parameters**

Exposure Guidelines:

Ingredient	Occupational Exposure Limits	
	OSHA-PEL	ACGIH-TLV
Portland Cement	15 mg/m ³ (total); 5 mg/m ³ (resp)	1 mg/m ³ in 8 hours (no asbestos and <1% crystalline silica, respirable fraction)
Silica, crystalline, quartz	((10 mg/m ³)/(%SiO ₂ +2))(resp) ((30 mg/m ³)/(%SiO ₂ +2))(total) ((250)/%SiO ₂ +5)mppcf(resp)	0.025 mg/m ³ in 8 hours (respirable)
Calcium Carbonate	15 mg/m ³ (total); 5 mg/m ³ (resp)	10 mg/m ³

8.2 Exposure Controls

Engineering Controls: When using product, provide local and general exhaust ventilation to keep airborne dust concentrations below exposure limits. Use wet methods, if appropriate, to reduce the generation of dust.

8.3 Individual Protective Measures

General Health and Safety: Handle according to established industrial health and safety practices. Do not eat, smoke or drink where material is handled processed or stored. Wash hands carefully before eating or smoking.

Eye/Face Protection: Safety glasses or goggles are recommended when using this product

Respiratory Protection: A NIOSH approved dust mask or filtering facepiece is recommended in poorly ventilated areas or when permissible exposure limits may be exceeded. Respirators should be selected by and used under the direction of a trained health and safety professional following requirements found in OSHA's respirator standard (29 CFR 1910.134) and ANSI's standard for respiratory protection (Z88.2)

Skin Protection: Not required as packaged. If dust is generated during use: Use impervious waterproof, abrasion and alkali-resistant boots and protective long-sleeved and long-legged clothing to protect skin from contact.

Hand Protection: Not required as packaged. If dust is generated during use: Use impervious, waterproof, and alkali-resistant gloves. Do not rely on barrier creams in place of impervious gloves. Recommended material: Nitrile®

Section 9 - Physical and Chemical Properties

Physical State:	Solid	Lower and Upper Explosive (Flammable) Limits:	Not Applicable
Color:	Various	Vapor Pressure:	Not Applicable
Odor:	Odorless	Vapor Density:	Not Applicable
Odor Threshold:	Not Available	Relative Density:	2.1 - 2.4
pH in Water:	12-13	Solubility:	Insoluble
Melting Point:	Not Applicable	Solubility in Water:	Not Applicable
Boiling Point:	>1000°C (>1832°F)	Partition Coefficient: n-octanol/water:	Not Applicable
Flash Point:	Not Flammable. Not Combustible	Auto-Ignition Temperature:	Not Applicable
Burning Time:	Not Applicable	Decomposition Temperature:	Not Applicable
Burning Rate:	Not Applicable	SADT:	Not Applicable
Evaporation Rate:	Not Applicable	Viscosity:	Solid
Flammability (solid, gas):	Not Applicable		

Section 10 - Stability and Reactivity

10.1 Reactivity No dangerous reaction known under conditions of normal use

10.2 Chemical Stability The product is stable.

10.3 Possibility of Hazardous Reactions

Under normal conditions of storage and use, hazardous reactions will not occur.

10.4 Conditions to Avoid

No specific data.

10.5 Incompatible Materials

Reactive or incompatible with the following materials: oxidizing materials, acids, aluminum and ammonium salt. Silica reacts violently with powerful oxidizing agents such as fluorine, boron trifluoride, chlorine trifluoride, manganese trifluoride and oxygen difluoride yielding possible fire and/or explosions. Silicates dissolve readily in hydrofluoric acid producing a corrosive gas.

10.6 Hazardous Decomposition Products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11 - Toxicological Information**11.1 Information on Toxicological Effects****Likely Routes of Exposure:** Skin Contact, eye contact and inhalation.**Symptoms Related to Physical/Chemical/Toxicological Characteristics:**

Eye: .

Skin: Causes skin irritation. Wear gloves when handling to avoid drying and mechanical abrasion of the skin. May cause sensitization by skin contact.

Ingestion: Not a normal route of exposure. May result in obstruction and temporary irritation of the digestive tract.

Inhalation: Dust may cause respiratory tract irritation.

Mutagenicity: Not classified.

Reproductive Toxicity: Not classified.

Teratogenicity: Not classified.

Aspiration Hazard: Not classified.

Acute Toxicity:

Calculated Overall Chemical Acute Toxicity Values		
LC50 (Inhalation)	LD50 (Oral)	LD50 (Dermal)
> 5mg/l/4h, rat	> 2000 mg/kg, rat	>2000 mg/kg, rabbit

Carcinogenicity Classification:

Ingredient	OSHA	IARC	ACGIH	NTP
Portland Cement	-	-	A4	-
Quartz (Crystalline Silica)	-	1	A2	Known to be a human carcinogen.

Specific Target Organ Toxicity (Single Exposure):

Ingredient	Category	Route of Exposure	Target Organs
Quartz (Crystalline Silica)	Category 3	Inhalation	Respiratory tract irritation

Specific Target Organ Toxicity (Repeated Exposure):

Ingredient	Category	Route of Exposure	Target Organs
Quartz (Crystalline Silica)	Category 2	Inhalation	Respiratory tract and kidneys

11.2 Potential Chronic Health Effects:

General: Repeated or prolonged inhalation of dust may lead to chronic respiratory irritation.

carcinogenic to humans. This classification is based on the findings of laboratory animal studies (inhalation and implantation) and epidemiological studies that were considered sufficient for carcinogenicity. Excessive exposure to Quartz (crystalline silica) can cause silicosis, a non-cancerous lung disease.

Carcinogenicity:

Mutagenicity: No known significant effects or critical hazards.

Teratogenicity: No known significant effects or critical hazards.

Developmental Effects: No known significant effects or critical hazards.

Fertility Effects: No known significant effects or critical hazards.

Section 12 - Ecological Information**12.1 Toxicity**

Persistence and Degradability: There are no data available.

Bioaccumulation Potential: There are no data available.

Mobility in Soil: Soil/ water partition coefficient (Koc): Not available.

Other Adverse Effects: No known significant effects or critical hazards.

Ecotoxicity: No recognized unusual toxicity to plants or animals.

Section 13 - Disposal Considerations**13.1 Disposal Methods**

Salvage spilled concrete material where possible. Uncontaminated material may be reused. Dispose of waste material in accordance with local state and federal laws and regulations.

Section 14 - Transport Information**Special Precautions for User:** Ensure that persons transporting the product know what to do in the event of an accident.**Transporting in Bulk According to Annex II of MARPOL 73/78 and the IBC Code:** Not Regulated

Transport Parameters	DOT Classification	IMDG	IATA
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UN Number	Not Regulated	Not Regulated	Not Regulated
UN Proper Shipping Name	-	-	-
Transport Hazard Name	-	-	-
Packing Group	None	None	None
Environmental Hazard	-	-	-

Section 15 - Regulatory Information

Status under USDOL-OSHA Hazard Communication Rule, 29 CFR 1910.1200:

This product is considered a "hazardous chemical" under this regulation, and should be part of any hazard communication program.

Status under CERCLA/SUPERFUND 40 CFR 117 and 302:

Not Listed

Hazard Category under SARA (Title III), Sections 311 and 312

This product qualifies as a "hazardous substance" with delayed health effects.

Status under SARA (Title III), Section 313

This product does not contain Emergency Planning and Community Right to Know (EPCRA) Section 313 chemicals in excess of the applicable de minimis concentration specified in EPCRA Section 313 Section 372.38(a). Trace amounts of naturally occurring chemicals might be detected during chemical analysis.

Status under TSCA (as of May 1997)

The ingredients of this product are listed on the TSCA inventory or are exempt.

Status under the Federal Hazardous Substances Act

This product is a "hazardous substance" subject to statutes promulgated under the subject act.

Status under California Proposition 65

This product contains up to 0.05 percent of chemicals (trace elements) known to the State of California to cause cancer, birth defects or other reproductive harm. California law requires the manufacturer to give the above warning in the absence of definitive testing to prove that the defined risks do not exist.

State Right to Know:

Portland Cement (65997-15-1)
 U.S. - Idaho - Non-Carcinogenic Toxic Air Pollutants - Acceptable Ambient Concentrations
 U.S. - New Jersey - Right to Know Hazardous Substance List
 U.S. - Washington - Permissible Exposure Limits - TWAs

Quartz (crystalline silica) (14808-60-7)

U.S. - Idaho - Non-Carcinogenic Toxic Air Pollutants - Acceptable Ambient Concentrations
 U.S. - New Jersey - Right to Know Hazardous Substance List
 U.S. - Washington - Permissible Exposure Limits - TWAs

Section 16 - Other Information

Date of Preparation: 10-19-2017
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Revision Date: Not Applicable

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End of Safety Data Sheet