Strong-Seal® Geopolymer
Safety Data Sheet
Rev: 02-2025

Section 1 Product Description

Product Name:	Strong-Seal® Geopolymer
Synonyms:	Geopolymer, Geo, Strong-Seal® Geo
General Use:	To stop leaks, restore structural integrity and provide corrosion protection to concrete, and masonry wastewater structures and concrete, masonry, and steel stormwater structures.
Product Description:	A geopolymer product blended with recycled pozzolans, aggregate, fiberglass reinforcement, and performance enhancing admixtures.
Manufacturer:	The Strong Company, Inc. 4505 Emmett Sanders Road Pine Bluff, AR 71601
Chemical Information:	(870) 535-7617
Emergency Number:	(800) 982-8009

Section 2 Hazards Identification

Classification of the product in accordance with paragraph (d) of §1910.1200;

Signal Word:
Danger

Warning: This product can expose you to chemicals including crystalline, silica, propylene oxide, ethylene oxide, and 1,4-Dioxane, which are known to the state of California to cause cancer. For more information, go to www.P65Warnings.ca.gov.

GHS Classification:

Acute Toxicity Oral, Category 4
Skin Corrosion/Irritation, Category 1A
Serious Eye Damage/Eye Irritation, Category 1
Skin Sensitization, Category 1
Carcinogenicity, Category 1A
Specific Target Organ Toxicity Single Exposure, Category 3
Specific Target Organ Toxicity Repeat Exposure, Category 2

Hazard Statements:

Harmful if swallowed.
Causes severe skin burns and eye damage.
May cause an allergic skin reaction.
May cause cancer.
May cause respiratory irritation.
May cause damage to lungs through prolonged or repeated inhalation.

Precautionary Statements:

Prevention:

Keep product sealed in original packaging. Store in a dry, well-ventilated place. Wash thoroughly after handling.
Do not eat, drink or smoke when using this product.
Wear protective gloves, clothing, and eye and face protection. Contaminated work clothing must not be allowed out of the workplace.
Obtain special instructions before use. Do not handle until all instructions have been read and understood.
Do not breathe dust, fumes, gases, mists, vapors, or sprays.
Use only outdoors or in a well-ventilated area. In case of inadequate ventilation wear respiratory protection.
Dispose of contents/container in accordance with local/regional/international regulations.

Response:

In case of inhalation, remove to well-ventilated place. If breathing difficulty occurs, administer oxygen. Seek medical help if coughing and other medical symptoms do not subside.
In case of eye contact, immediately flush eyes with copious amounts of water. Continue flushing for 15 minutes including under the lids to remove all particles. Call a physician immediately if irritation persists.
In case of skin contact, wash skin with pH-neutral soap and water. Apply moisture renewing lotions to heal dry, irritated skin. Seek medical attention in all cases of severe irritation or burns.
In case of ingestion, do NOT induce vomiting. If conscious, have the victim drink plenty of water and call a physician

Section 3 Composition/Information on Ingredients

Chemical Name:	Common Name:	CAS #:	Weight %:*
Fly ash	Fly ash	68131-74-8	<60%
Crystalline silica	Masonry sand	14808-60-7	<50%
Portland cement	Portland cement	65997-15-1	<10%
Proprietary admixture blend*	Concrete admixtures	Varies*	<10%
Fibrous glass	Chopped fiberglass strands	65997-17-3	<5%

*Proprietary admixture blend and weight percentages are claimed as trade secrets of The Strong Company, Inc.

Section 4 First-Aid Measures

Inhalation: Remove to well-ventilated place. If breathing difficulty occurs, administer oxygen. Seek medical help if coughing and other medical symptoms do not subside.

Eye Contact: Immediately flush eyes with copious amounts of water. Continue flushing for 15 minutes including under the lids to remove all particles. Call a physician immediately if irritation persists.

Skin Contact: Wash skin with pH-neutral soap and water. Apply moisture renewing lotions to heal dry, irritated skin. Seek medical attention in all cases of severe irritation or burns.

Ingestion: Do NOT induce vomiting. If conscious, have the victim drink plenty of water and call a physician immediately.

Section 5 Fire-Fighting Measures

General Hazards: Product is not hazardous during normal fire-fighting procedures and contains less than 1% organic substances that may produce smoke, fumes and/or hazardous gases.

Extinguishing Media: Carbon dioxide, water, dry chemical, or foam may be used if smoldering occurs.

Fire-Fighting Protection: No special protection required.

Fire and/or Explosion Hazards: No fire or explosion hazards.

Hazardous Combustion Products: Smoke, fumes, carbon dioxide, or carbon monoxide may be released.

Section 6 Accidental Release Measures

Steps to Take in Case Material is Released or Spilled: Product is not considered hazardous according to RCRA (40 CFR Part 261). Follow personal protective equipment recommendations found in Section 8 of this SDS at a minimum. Avoid creating dust and use adequate ventilation and/or dust collection during clean-up. Shovel or vacuum product into a sealed container pending a waste disposal evaluation. Do not discharge into lakes, ponds, streams, or waterways.

Section 7 Handling and Storage

Handling: Avoid creating and breathing dust. At a minimum, follow personal protective equipment recommendations found in Section 8 of this SDS.

Storage: Product reacts with water. Store product in a dry location. Keep packaging sealed until use.

Section 8 Exposure Controls/Personal Protection

	OSHA PEL		ACGIH TLV
Chemical Name:	**Total Dust:**	**Respirable Fraction:**	**TWA:**
Fly ash	15 mg/m^3	5 mg/m^3	10 mg/m^3
Crystalline silica	0.29 mg/m^3	0.10 mg/m^3	0.05 mg/m^3
Portland cement	15 mg/m^3	5 mg/m^3	10 mg/m^3
Proprietary admixture blend*	N/A	2 mg/m^3	2 mg/m^3
Fibrous glass	15 mg/m^3	5 mg/m^3	10 mg/m^3

Control Parameters

Engineering Measures: Use local exhaust ventilation or other engineering controls to reduce dust concentrations below overexposure levels. Refer to ACGIH publication "Industrial Ventilation" or similar publications for design of ventilation systems.

Personal Protective Equipment (PPE)

Respiratory Protection: Respirators are recommended during normal operation. When concentrations exceed PEL or TLV limits, respirator use is required.

Respirator Type(s): N95 filtering facepiece or P95 half facepiece respirators are adequate for use during normal operation.

Eye Protection: Wear a full face shield to prevent contact with the eyes and face. Contact lenses should not be worn when handling products containing cement.

Skin Protection: Wear impervious, alkali resistant gloves, closed-toe shoes or boots, and protective clothing to prevent contact with the skin.

Glove Type(s): Nitrile or latex gloves with a recommended thickness of 6 mils or greater.

Section 9 Physical and Chemical Properties

Formula:	See Section 3	**Specific Gravity:**	Varies (mixture)
Appearance:	Gray to brown powder	**Vapor Pressure:**	N/A (solid)
Odor:	Odorless	**Evaporation Rate (BuAc = 1):**	N/A (solid)
Lower Flammability Limit:	Not combustible	**Vapor Density (Air = 1):**	N/A (solid)
pH:	11 – 13 (10% slurry in water)	**Solubility in Water:**	<1%
Melting Point:	N/A	**Viscosity:**	N/A (solid)
Boiling Point:	N/A	**Volatile Organic Compounds:**	N/A

Section 10 Stability and Reactivity

Reactivity: Reacts readily with water and produces an exothermic reaction (heat) a caustic mixture.

Stability: Stable under normal conditions.

Conditions to Avoid: Unintentional contact with water.

Incompatible Materials: Aluminum powder and other alkali and alkaline earth elements react with product to liberate hydrogen gas. Acids violently react with product and generate a large amount of heat. Hydrofluoric acid will dissolve the silica found in fly ash, portland cement, and masonry sand.

Hazardous Decomposition Products: None.

Hazardous Polymerization: Will not occur.

Section 11 Toxicological Information

Route(s) of Entry: Inhalation, eye contact, skin contact, ingestion

Target Organs: Acute: Eyes, Respiratory System, Skin, Stomach
Chronic: Respiratory System, Immune System, Skin, Kidneys, Joints

Acute Symptoms: Inhalation of the product can irritate the nose and respiratory tract causing inflammation, sneezing, runny nose, and/or coughing. Contact with moist tissue areas such as the eyes and nose can cause mild irritation to severe burns or even blindness. These areas should be flushed with water immediately. Skin contact can cause dryness or cracking and trigger dermatitis in sensitive individuals. Ingestion of small amounts may cause nausea and is not known to be harmful; however, ingestion of large amounts can lead to severe burns of the mouth, throat, stomach, and digestive tract.

Delayed Symptoms: Prolonged skin and moist tissue contact can lead to delayed chemical burns that may range from mild to third degree. Burns can develop with little to no warning as pain or discomfort is normally not felt immediately after contact. Full extent of the damage may not be felt until several hours after contact. As such, pain or discomfort should not be used to determine the severity of burns. Always use pH-neutral soap and water to immediately wash areas that were exposed.

Chronic Symptoms: Dermatitis may occur in individuals with repeated exposure due to the presence of small amounts of hexavalent chromium. Crystalline silica is listed by the IARC as a known carcinogen and causes the chronic lung disease known as silicosis. Silicosis is known to increase the risk of contracting tuberculosis. Crystalline silica has also been shown to lead to autoimmune disorders and renal disorders.

Acute Toxicity

Chemical Name:	CAS #:	Oral LD50:	Dermal LD50:	Inhalation LC50:
Fly ash	68131-74-8	Not determined	Not determined	Not determined
Crystalline silica	14808-60-7	500 mg/kg (rat)	Not determined	Not determined
Portland cement	65997-15-1	Not determined	Not determined	Not determined
Proprietary admixture blend*	Varies	Not determined	Not determined	Not determined
Fibrous glass	65997-17-3	Not determined	Not determined	Not determined

Carcinogenicity

Chemical Name:	CAS #:	IARC:	NTP:	OSHA:
Fly ash	68131-74-8	Not listed	Not listed	Not listed
Crystalline silica	14808-60-7	Listed, Group 1	Listed, Known	Not listed
Portland cement	65997-15-1	Not listed	Not listed	Not listed
Proprietary admixture blend*	Varies	Not listed	Not listed	Not listed
Fibrous glass	65997-17-3	Not listed	Not listed	Not listed

Section 12 Ecological Information

Overview: Product is not expected to present an ecological hazard.
Mobility: Product is a solid and is expected to have low to zero mobility in soil.
Persistence: Product is expected to persist in the environment for an extensive period of time as it changes from a fine powder to a hard solid when exposed to water.
Degradability: Product is not expected to biodegrade quickly.
Other Adverse Effects: None known

Section 13 Disposal Considerations

Overview: Not considered a hazardous waste under RCRA 40 CFR Part 261.
Disposal Methods: Dispose of in accordance with local, state, and federal regulations. Always contact a permitted waste disposer to assure compliance. Refer to Section 8 to minimize exposure.
Waste Disposal Code(s): N/A

Section 14 Transport Information

Overview: Not considered a hazardous substance under U.S. DOT regulations.
UN No.: N/A **Hazard Class:** N/A
UN Shipping Name: N/A **Packing Group No.:** N/A

Section 15 Regulatory Information

OSHA HCS: The components of this product are considered hazardous chemicals under this regulation and should be included in an employer's Hazard Communication Program.
TSCA Status: All non-proprietary components in this product are on the TSCA Inventory.
FHSA: A component of this product, Portland cement, is considered as a hazardous substance. As such, this product is subject to statutes promulgated under the act.

Reporting Requirements:	**EPCRA (SARA Title III)**					**CERCLA**	**CAA**
Chemical Name:	**§ 302:**	**§ 304:**	**§ 311:**	**§ 312:**	**§ 313:**	**40 CFR 302:**	**112(r)**
Fly ash	No	No	Yes, 10,000 lb	Yes, 10,000 lb	No	No	No
Crystalline silica	No	No	Yes, 10,000 lb	Yes, 10,000 lb	No	No	No
Portland cement	No	No	Yes, 10,000 lb	Yes, 10,000 lb	No	No	No
Proprietary admixture blend	No	No	Yes, 10,000 lb	Yes, 10,000 lb	No	No	No
Fibrous glass	No	No	Yes, 10,000 lb	Yes, 10,000 lb	No	No	No

California Prop. 65: A component of this product, crystalline silica, is a substance known to the State of California as a carcinogen. This product may also contain trace amounts of heavy metals or organic compounds known to the State of California to cause cancer, birth defects, or other reproductive toxins.

Section 16 Other Information

The information provided in this (Material) Safety Data Sheet represents a compilation of data drawn directly from various sources available to The Strong Company, Inc. that we believe to be accurate. The Strong Company, Inc. makes no representation or guarantee as to the suitability of this information to a particular application of the substance covered in this (Material) Safety Data Sheet. Users have the responsibility to comply with all health and safety laws, as well as environmental regulations when using this product, and should determine the suitability of the product for its intended use.

Glossary

ACGIH	American Conference of Governmental Industrial Hygienists
CAA	Clean Air Act
CAS	Chemical Abstract Service Number
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations
DOT	U.S. Department of Transportation
EPCRA	Emergency Planning and Community Right-to-Know Act
FHSA	Federal Hazardous Substances Act
HCS	Hazard Communication Standard
IARC	International Agency for Research on Cancer
LD(C)50	Median Lethal Dose (Concentration)
OSHA	Occupational Safety and Health Administration
PEL	Permissible Exposure Limit
N/A	Not Available or Not Applicable
NTP	National Toxicology Program
RCRA	Resource Conservation and Recovery Act
SARA	Superfund Amendments and Reauthorization Act
TLV	Threshold Limit Value
TSCA	Toxic Substances Control Act
TWA	8-Hour Time Weighted Average