ThinCast™ Safety Data Sheet

SECTION 1: IDENTIFICATION

1.1 Product Identifier

Product Form: Mixture

Product Name: Precast/Prestressed Concrete, Architectural Precast Concrete

1.2 Recommended Use Of Chemical and Restrictions On Use

Use: Open joint, back ventilated, prestressed concrete rainscreen panel, for use as architectural cladding.

1.3 Name, Address, and Telephone of Product Manufacturer

Company: High Concrete Group LLC.
125 Denver Road
Denver, PA 17517
www.highconcrete.com

1.4 Emergency Telephone Number

Telephone Number: 1-877-844-4418

Date of Preparation: 02/03/2020 Version: 1.0

SECTION 2: HAZARD IDENTIFICATION

2.1 Classification of the Substance or Mixture

GHS-US Classification: Not classified

2.2 Label Elements

GHS-US Labeling: The product is classified according to the Global Harmonized System (GHS)

Hazard Pictograms:

2.3 Other Hazards

Exposure may aggravate pre-existing eye, skin, or respiratory conditions. May cause abrasion/ irritation. This product is physiologically inert in its current massive form and poses no physical or health hazards under normal conditions of use. If the end user generates dust by processing the material (i.e. cutting, drilling, grinding, etc.) the dust and particles generated pose a variety of health hazards. The information contained in this document is based on the health hazards if the product is processed downstream and dust or fine particles are generated.

2.4 Unknown Acute Toxicity

GHS-US: No data available

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substance

Not applicable

3.2 Mixture

Hazardous Components *(Chemical identity/Common Names)*	**Product Identifier** *(CAS No)*	**Percent** *(Weight/Weight of Materials)*
Hydraulic Cement(s) Portland Cement	65997-15-1	30% - 45%
Limestone (Calcium Carbonate CaCO3) Fine Aggregate	1317-65-3	0% - 80% 40% - 65%
Aggregate (sand) Crystalline Silica (Quartz and Igneous) Fine Aggregate	14808-60-7	40% - 65% 40% - 65%
Iron Oxide Pigments	1309-37-1, 20344-49-4, 1317-61-9	≤ 3%
Particulates not Otherwise Classified	N/A	N/A

SECTION 4: FIRST AID MEASURES

4.1 Description of First Aid Measures

Eye: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. If easy to do, remove contact lenses, if worn. If eye irritation persists: Get medical advice/attention.

Skin: If irritation occurs, flush skin with plenty of water. Remove contaminated clothing and shoes. Wash clothing before reuse. Call a physician if irritation develops and persists.

Inhalation: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention if you feel unwell.

Ingestion: Not a normal route of exposure. If swallowed, do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical advice/attention.

4.2 Most Important Symptoms and Effects, Both Acute and Delayed

Symptoms/Injuries:

Not expected to present a significant hazard under anticipated conditions of normal use.

Symptoms/Injuries After Inhalation:

Not expected to present a significant inhalation hazard under anticipated conditions of normal use. Prolonged inhalation of dust may cause respiratory irritation. Repeated or prolonged exposure to respirable (airborne) crystalline silica dust will cause lung damage in the form of silicosis. Symptoms will include progressively more difficult breathing, cough, fever and weight loss.

Symptoms/Injuries After Skin Contact:

Direct contact may cause irritation by mechanical abrasion. Dust may cause irritation or allergic skin reaction.

Symptoms/Injuries After Eye Contact:

Dust may cause eye damage.

Symptoms/Injuries After Ingestion:

Ingestion may cause adverse effects.

Chronic Symptoms:

None expected under normal conditions of use. If dust is generated, repeated exposure through inhalation may cause cancer or lung disease. Repeated or prolonged exposure to respirable (airborne) crystalline silica dust will cause lung damage in the form of silicosis. Symptoms will include progressively more difficult breathing, cough, fever and weight loss.

4.3 Indication of Any Immediate Medical Attention and Special Treatment Needed

If exposed or concerned, get medical advice and attention. If medical advice is needed, have product SDS at hand.

SECTION 5: FIRE-FIGHTING MEASURES

5.1 Extinguishing Media

Suitable Extinguishing Media:

Use extinguishing media appropriate for the class of fire. Water spray for Class A fires, Foam for Class A and B fires, Carbon Dioxide (CO2) for Class B and C fires, Dry Chemical for Class A, B and C fires.

5.2 Special Hazards Arising From the Substance or Mixture

Fire Hazard: Not flammable

Explosion Hazard: Product is not explosive

Reactivity: Hazardous reactions will not occur under normal conditions.

5.3 Special Protective Equipment and Precautions for Fire-Fighters

Firefighting Instructions:

Use firefighting measures appropriate for the surrounding fire.
Do not breathe fumes from fires.

Special Protective Equipment:

Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal Precautions, Protective Equipment and Emergency Procedures

General Measure:

Hardened concrete is not listed as a hazardous waste under designations by the EPA or DOT. Use dust control measures to minimize generation of airborne dust. Avoid prolonged contact with eyes, skin and clothing. Do not breathe dust.

6.1.1 For Non-emergency Personnel

Protective Equipment: Use appropriate personal protective equipment (PPE).

Emergency Procedures: Evacuate unnecessary personnel.

6.1.2 For Emergency Responders

Protective Equipment: Equip cleanup crew with proper protection.

Emergency Procedures: Ventilate area. Upon arrival at the scene, a first responder is expected to recognize the presence of dangerous goods, protect oneself and the public, secure the area, and call for the assistance of trained personnel as soon as conditions permit.

6.2 Environmental Precautions

Prevent entry to sewers and public waters.

6.3 Methods and Material for Containment and Cleanup

For Containment:

Contain solid spills with appropriate barriers and prevent migration and entry into sewers or streams.

Methods for Cleanup:

Cleanup spills immediately and dispose of waste safely. Recover the product by vacuuming, shoveling or sweeping. Utilize a dust suppressant and proper PPE when removing mechanically. Transfer spilled material to a suitable container for disposal. Contact competent authorities after a spill.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for Safe Handling

Additional Hazards When Processed:

Cutting, drilling, crushing or grinding concrete or other crystalline silica-bearing materials will release respirable crystalline silica. Use all appropriate measures of dust control or suppression, and Personal Protective Equipment (PPE) described in Section 8. Where excessive dust may result, use approved respiratory protection equipment.

Precautions for Safe Handling:

Wash hands and other exposed areas with soap and water before eating, drinking or smoking and when leaving the worksite. Avoid prolonged contact with eyes, skin and clothing. Avoid breathing dust.

Hygiene Measures:

Handle in accordance with good industrial hygiene and safety procedures.

7.2 Conditions for Safe Storage, Including Any Incompatibilities

Technical Measures: Comply with applicable regulations.

Storage Conditions: Avoid any dust buildup by frequent cleaning and good housekeeping.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control Parameters

OCCUPATIONAL EXPOSURE LIMITS		
Ingredient	**OSHA – PEL** *(permissible exposure limit)*	**OSHA – AL** *(action level)*
Crystalline silica (Quartz) (Concrete contains aggregate materials which may contain crystalline silica)	50 µg/m³	25 µg/m³
Particulates not otherwise classified	15 µg/m³ (Total) 5 µg/m³ (Respirable)	

8.2 Exposure Controls

Engineering Controls:

When cutting, drilling, crushing or grinding concrete, provide local and general exhaust ventilation to keep airborne dust concentrations below exposure limits. Utilize hand power tool with built in vacuum systems or water suppressant systems to reduce the generation of dust.

8.3 Individual Protective Measures

Personal Protective Equipment:

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

Skin Protection:

Hand Protection: Wear suitable gloves.

Body Protection: Wear suitable protective clothing.

Respiratory Protection:

The following applies to the product if it is cut, sanded or altered in such a way that excessive and/or significant particulates and/or dust may be generated: 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).

General Health and Safety:

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

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on Basic Physical and Chemical Properties

Appearance:	Colored by cements, pigments or aggregates
Physical State:	Solid
Odor:	Odorless
Odor Threshold:	N/A
pH:	N/A
Melting Point/Freezing Point:	N/A
Initial Boiling Point and Boiling Range:	N/A
Flash Point:	N/A
Evaporation Rate:	N/A
Flammability(slid, gas):	Not Flammable
Upper/Lower Flammability or Explosive Limits:	N/A
Vapor Pressure:	N/A
Vapor Density:	N/A
Relative Density:	1.5 – 3.0
Solubility: Insoluble	
Partition coefficient: n-octanol/water:	N/A
Auto-ignition Temperature:	N/A
Decomposition Temperature:	N/A
Viscosity:	N/A

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity

No dangerous reaction known under conditions of normal use.

10.2 Chemical Stability

Stable under normal conditions of use.

10.3 Possibility of Hazardous Reactions

No dangerous reaction known under conditions of normal use.

10.4 Conditions to Avoid

None known.

10.5 Incompatible Materials

Hardened concrete will react with most acids in a neutralization-type reaction. Heat, spattering and evolution of potentially toxic gases (such as HCl, NO, or NO2) may result depending on the acid involved. Prolonged contact of an acid with the concrete may cause etching or other damage.

10.6 Hazardous Decomposition Products

None known

SECTION II: TOXICOLOGICAL INFORMATION

11.1 Information On Toxicological Effects

Likely Routes of Exposure:

Skin contact, eye contact and inhalation.

Symptoms related to physical, chemical and toxicological characteristics:

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.

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.

11.2 Delayed, Immediate, and Chronic Effects of Short- And Long-Term Exposure

Skin Corrosion/Irritation: Causes skin irritation.

Serious Eye Damage/Irritation: Causes serious eye irritation.

Respiratory Sensitization: Not classified.

Skin Sensitization: May cause allergic skin reaction.

STOT-Single Exposure: Dust may cause respiratory tract irritation.

Chronic Health Effects:

None expected under normal conditions of use. If dust is generated, repeated exposure through inhalation may cause cancer or lung disease. Repeated or prolonged exposure to respirable crystalline silica dust will cause lung damage in the form of silicosis.

Carcinogenicity: Respirable crystalline silica is known to cause cancer.

Germ Cell Mutagenicity: Not classified.

Reproductive Toxicity: Not classified.

STOT - Repeated Exposure:

Causes damage to lungs through prolonged or repeated exposure. Respirable crystalline silica in the form of quartz or cristobalite from occupational sources is listed by the International Agency for Research on Cancer (IARC) and National Toxicology Program (NTP) as a lung carcinogen. While there may be a factor of individual susceptibility to a given exposure to respirable silica dust, the risk of contracting silicosis and the severity of the disease is clearly related to the amount of dust exposure and the length of time (usually years) of exposure.

Aspiration Hazard: Not classified.

SECTION 12: ECOLOGICAL INFORMATION

12.1 Ecotoxicity
Acute/Chronic Toxicity: No ecological consideration when used according to directions.

12.2 Persistence and Degradability
Not available.

12.3 Bioaccumulative Potential
Not available.

12.4 Mobility in Soil
Not available

12.5 Other Adverse Effects
Not available

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste Treatment Methods

Disposal Method:
This material must be disposed of in accordance with all local, state, provincial, and federal regulations. Material can be recycled.

SECTION 14: TRANSPORT INFORMATION

14.1 UN Number: Not regulated

14.2 UN Proper Shipping Name:
Not regulated

14.3 Transport Hazard Class(es):
N/A

14.4 Packing Group:
N/A

14.5 Environmental Hazards:
N/A

14.6 Transport in Bulk According to Annex II of Marpol 73/78 and the IBC Code:
N/A

14.7 Special Precautions for User:
Do not handle until all safety precautions have been read and understood.

SECTION 15: REGULATORY INFORMATION

15.1 Safety, Health and Environmental Regulations Specific for the Product in Question

This product, in an unmodified state, is not considered by OSHA to be hazardous and need not be included in the employer's hazard communication program. The hazards described in this SDS apply to the product if respirable dusts are generated from use (cutting, grinding, drilling, abrasive blasting, pulverizing, etc.) Crystalline silica (airborne particulates of respirable size) generated during use is a substance known to be a carcinogen.

SECTION 16: OTHER INFORMATION, DATE OF PREPARATION OR LAST REVISON

16.1 Date of Preparation: February 3, 2020

Notice to Reader:

The information contained in this Safety Data Sheet is based on hazard information from sources considered technically reliable and has been prepared in good faith in accordance with available information. The SDS should not be construed as the sum of all protective measures that may be taken. It is the responsibility of the employer to evaluate the information and to determine the extent of the hazard and what personal protective measures should be taken. Employers must ensure that SDS's are readily accessible to employees.