

# SAFETY DATA SHEET

## Section 1:

## IDENTIFICATION

Product Name:	Belvedere Clay
Generic ID:	Ball Clay
Usage and Restrictions:	Used as raw ingredient for natural pozzolan (ASTM C 618).
Supplier Details:	York Building Products 950 Smile Way York, PA 17404
Emergency Phone #:	717.848.2831

## Section 2:

## HAZARD(S) IDENTIFICATION

GHS Classification:	Carcinogenicity:	1A
	Eye Irritation:	2A
	Repeated Exposure Skin Irritation:	2
	Specific Target Organ Toxicity:	2

GHS Label Elements:



Signal Word: Danger

Hazard Statements: 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: Wash hands thoroughly after handling. 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.

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 in eyes: Rinse continuously with water for several minutes. Remove contact lenses, if present and easy to do.

Storage: Restrict or control access to stockpile areas. Engulfment hazard: To prevent burial or suffocation, do not enter a confined space, such as a silo, bulk truck or other storage container or vessel that stores or contains aggregates without an effective procedure for assuring safety.

Disposal: Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazards Not Otherwise Classified: None known.



## Section 3:

## COMPOSITION / INFORMATION ON INGREDIENTS

Ingredient(s)	CAS Number	% (by weight)	OSHA/MSHA PEL (mg/M <sup>3</sup> )	ACGIH TLV (mg/M <sup>3</sup> )
Kaolinite	1318-74-7	45-50		
Crystalline Silica	14808-60-7	50-55		

## Section 4:

## FIRST AID MEASURES

### Description of Necessary First Aid Measures:

Eye Contact:	Immediately flush with plenty of water for at least 15 minutes. Hold eyelids apart. Remove contacts if present and easy to do. Beyond flushing, do not attempt to remove material from the eye(s). Get medical attention if irritation develops or persists.
Inhalation:	Move to fresh air. Call a physician if symptoms develop or persist.
Skin Contact:	No adverse effects are suspected to exist. Wash contaminated area with soap and water. Get medical attention if irritation develops and persists.
Ingestion:	No negative effects are known to exist for incidental quantities of clay ingested into the stomach. For suspected large quantities, consult a physician for advice.

### Most Important Symptoms & Effects, Both Acute and Delayed:

Inhaling dust may cause discomfort in the chest, shortness of breath, and coughing. Prolonged inhalation may cause chronic health effects. This product contains crystalline silica. Prolonged or repeated inhalation of respirable crystalline silica liberated from this product can cause silicosis, and may cause cancer.

### Indication of Immediate Medical Attention and Special Treatment Needed, If Necessary:

Eye Contact:	Causes serious eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with possible redness and swelling.
Inhalation:	Dust may cause respiratory tract irritation.
Skin Contact:	No adverse effects are known to exist.
Ingestion:	Not a normal route of exposure. No adverse effects are known to exist.



**Section 5: FIRE-FIGHTING MEASURES**

**Extinguishing Media:**

- Suitable Extinguishing Media: Treat for surrounding material.
- Hazards from Fire: Under fire conditions, this product may emit toxic and/or irritating fumes.
- Unsuitable Extinguishing Media: Not available.
- Special Protective Equipment For Fire-Fighters: Use protective equipment appropriate for surrounding materials. No specific precautions.

**Section 6: ACCIDENTAL RELEASE MEASURES**

**Personal Precautions, Protective Equipment and Emergency Procedures:**

Wear appropriate protective equipment and clothing during clean-up of materials that contain or may release dust.

**Methods and Materials For Containment and Cleaning-Up**

Spilled material, where dust is generated, may overexpose cleanup personnel to respirable crystalline silica-containing dust. Do not dry sweep or use compressed air for clean-up. Wetting of spilled material and/or use of respiratory protective equipment may be necessary. Avoid discharge of fine particulate matter into drains.

Ball clay is not considered a hazardous waste.

**Section 7: HANDLING AND STORAGE**

**Precautions for Safe Handling:**

- Handling: Avoid contact with skin and eyes. Good housekeeping is key to prevent accumulation of dust. Avoid generating and breathing dust. Use wet methods, if appropriate, to reduce the generation of dust. The use of compressed air for cleaning clothing, equipment, etc, 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 or drinking.
- Conditions For Safe Storage, Including Any Incompatibilities: Avoid dust buildup by frequent cleaning and suitable construction of the storage area. Store in cool, dry, well-ventilated areas away from moisture. Keep containers tightly closed.



## Section 8: EXPOSURE CONTROLS AND PERSONAL MEASURES

### Control Parameters

Use NIOSH/MSHA- approved dust masks if exposure exceeds TLV or PEL limits (see below).

<u>Ingredient</u>	<u>Exposure Limits</u>
Crystalline Silica (Quartz)	ACGIH TLV: 0.025 mg/m <sup>3</sup>
	OSHA PEL: 0.1 mg/m <sup>3</sup>
	NIOSH: 0.05 mg/m <sup>3</sup>

### 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.

### Exposure Guidelines:

OSHA PELs, MSHA PELs, and ACGIH TLVs are 8-hr TWA values. NIOSH RELs are for TWA exposures up to 10-hr/day and 40-hr/wk. Occupational exposure to nuisance dust (total and respirable) and respirable crystalline silica should be monitored and controlled.

### Individual Protection Measures:

#### Hygiene Measures:

Observe good hygiene, such as washing after handling the material and before eating and drinking. Routinely wash work clothing and protective equipment.

#### Eye/Face Protection:

Wear safety glasses with side shields (or goggles).

#### Hand/Body Protection:

Use personal protective equipment as required.

#### Hand/Body Protection:

When performing work that produces dust or respirable crystalline silica in excess of applicable exposure limits, wear a NIOSH-approved respirator that is properly fitted and is in good condition. Respirators must be used in accordance with all applicable workplace regulations.



## Section 9:

## PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance:</b>	Appearance:	Solid lump or powder form possessing shades of brown, cream white or gray coloration.
	Color:	Not applicable.
	Odor:	Earth-like; especially when containing appreciable moisture content.
	Physical State:	Solid.
	pH:	4.0 - 8.0
	Melting Point:	> 1500 degrees C
	Boiling Point:	Not applicable.
	Flash Point:	Not applicable.
	Flammability:	Non-combustible solid.
	Lower Flammability/Explosive Limit:	Not applicable.
	Upper Flammability/Explosive Limit:	Not applicable.
	Vapor Pressure:	Not applicable.
	Vapor Density:	Not applicable.
	Solubility in water:	Insoluble.

## Section 10:

## STABILITY AND REACTIVITY

Reactivity:	Product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical Stability:	Material is stable under normal conditions.
Hazardous Reaction Possibility:	No dangerous reaction known under conditions of normal use.
Conditions to avoid:	Avoid contact with strong oxidizing agents.
Incompatible materials:	Crystalline silica may react violently with strong oxidizing agents, causing fire and explosions.
Hazardous decomposition:	Silica dissolves in hydrofluoric acid producing a corrosive gas-silicon tetrafluoride.



## Section 11: TOXICOLOGICAL INFORMATION

**Information On Toxicological Effects:**

**Acute Toxicity:** Not expected to be acutely toxic.

**Irritation/Corrosion:** Skin: Dust: May cause irritation through mechanical abrasion. This product is not expected to be a skin hazard.  
 Eyes: Direct contact with eyes may cause temporary irritation through mechanical abrasion.  
 Inhalation: Repeated inhalation of respirable crystalline silica (quartz) may cause silicosis, a fibrosis (scarring) of the lungs. Silicosis is irreversible and may be fatal. Silicosis increases the risk of contracting pulmonary tuberculosis. Some studies suggest that repeated inhalation of respirable crystalline silica may cause adverse health effects including lung and kidney cancer.  
 Ingestion: Not likely due to product form. However accidental ingestion may cause discomfort.

**Sensitization:** Respiratory sensitization: No respiratory sensitizing effects known.  
 Skin sensitization: Not known to be a dermal irritant or sensitizer.

**Mutagenicity:** No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

**Aspiration Hazard:** Not expected to be an aspiration hazard.

**Reproductive Toxicity:** Not expected to be a reproductive hazard.

**Symptoms related to physical, chemical, toxicological characteristics:** Dust: discomfort in the chest. Shortness of breath. Coughing.

**Carcinogenicity:** Respirable crystalline silica has been classified by IARC and NTP as a known human carcinogen, and classified by ACGIH as a suspected human carcinogen.

<b>Ingredient(s)</b>	<b>OSHA</b>	<b>IARC</b>	<b>ACGIH</b>	<b>NTP</b>
Crystalline Silica (Quartz) CAS 14808-60-7)	Not Listed	1 Carcinogenic to humans	A2	Known to be a human Carcinogen

**Specific Target Organ Toxicity (Acute Exposure):**

<b>Ingredient(s)</b>	<b>Route of Exposure</b>	<b>Target Organs</b>
Crystalline Silica (Quartz) CAS 14808-60-7)	Inhalation	Not reported to have effects.

**Specific Target Organ Toxicity (Chronic Exposure):**

<b>Ingredient(s)</b>	<b>Route of Exposure</b>	<b>Target Organs</b>
Crystalline Silica (Quartz) CAS 14808-60-7)	Inhalation	May cause damage to organs (lung through prolonged or repeated exposure.

Potential chronic health effects: General: Prolonged inhalation of respirable crystalline silica may be harmful. May cause damage to organs (lungs) through prolonged or repeated exposure. There are reports in the literature suggesting that excessive crystalline silica exposure may be associated with autoimmune disorders and other adverse health effects involving the kidney. In particular, the incidence of scleroderma (thickening of the skin caused by swelling and the thickening of fibrous tissue) appears to be higher in silicotic individuals. To date, the evidence does not conclusively determine a causal relationship between silica exposure and these adverse health effects.



**Section 12: ECOLOGICAL INFORMATION**

**Ecotoxicity:**

Not expected to be harmful to aquatic organisms. Discharging aggregate, sand and gravel dust and fines into waters may increase total suspended particulate (TSP) levels that can be harmful to certain aquatic organisms.

Persistence and degradability: Not applicable.  
 Bioaccumulative potential: Not applicable.  
 Mobility in soil: Not applicable.  
 Other adverse effects: No other adverse environmental effects (e.g., ozone depletion, photochemical ozone creation potential, global warming potential) are expected from this component.

**Section 13: DISPOSAL CONSIDERATIONS**

Disposal Methods: Do not allow fine particulate matter to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with fine particulates. Dispose of contents in accordance with local/regional/national/international regulations.

Hazardous Waste Code: Not regulated.

Waste From Residues/Unused Products: Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner.

Contaminated Packaging: Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty packaging materials should be recycled or disposed of in accordance with applicable regulations and practices.

**Section 14: TRANSPORTATION INFORMATION**

	<u>DOT Classification</u>	<u>IMDG</u>	<u>IATA</u>
UN Number	Not regulated.	Not regulated.	Not regulated.
UN Proper Shipping Name	----	----	----
Transport Hazard Class(es)	----	----	----
Packing Group	----	----	----
Environmental Hazards	----	----	----

Ball clay is non-hazardous under DOT regulations.



## Section 15:

## REGULATORY INFORMATION

### Safety, Health and Environmental Regulations/ Legislations Specific For The Chemical:

US: SDS prepared pursuant to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012.

CA Proposition 65: Ball clay contains crystalline quartz, some of which is respirable, and trace amounts of 2, 3, 7, 8 TCDD (a dioxin) on a PPT basis have been detected.

These chemicals are recognized by the state of California to be carcinogenic elements. IARC Monograph Volume 69 states that 2, 3, 7, 8 TCDD is a carcinogen to humans.

Toxic Substances Control Act: The known and reported components of ball clay are included on the EPA TSCA inventory.

European REACH: The known and reported components of ball clay are included on the European Chemical Agency pre-registration substance list.

## Section 16:

## OTHER INFORMATION

Date of Preparation:	08-10-20
Expiration Date:	None
Version:	1.0
Revision Date:	N/A

Disclaimer: We believe the statements, technical information and recommendations contained herein are reliable, but are given without warranty or guarantee of any kind. In particular, the data furnished in this sheet do not address hazards that may be posed by other materials mixed with limestone to produce limestone products. Users should review other relevant material safety data sheets before working with this limestone or working on limestone products. Inexperienced product users should obtain proper training before using this product. It is the user's responsibility to satisfy oneself as to the suitability and completeness of this information for the user's own particular use.

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