

MATERIAL SAFETY DATA SHEET

This document has been prepared in accordance with the Occupational Safety and Health Administration OSHA Hazard Communication standard, 29 Code of Federal Regulations (CFR) 1910.1200 and American National Standard for Hazardous Industrial Chemicals, ANSI Z400.1- 1993, Material Safety Data Sheets .-Preparations.

PRODUCT IDENTIFICATION Thin Brick and Quarry Tile  
 ADDRESS P.O. Box 9240, Canton, OH 44711-9240

**SECTION I**

MANUFACTURER'S NAME Ironrock Capital Inc.,  
 ADDRESS 1201 Millerton Street SE  
 Canton, Ohio  
 44707  
 EMERGENCY TELEPHONE NUMBER 330 484 4887  
 TELEPHONE NUMBER FOR INFORMATION 330 484 4887  
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**SECTION II**

Ironrock Capital products are mixtures of naturally occurring clays and shales fired to at least 1100 degrees C. Thin Brick and Tile are predominantly fired clay. Thin Brick and Tile are manufactured in various shapes, sizes and colors. Under normal conditions these products do not release hazardous material after installation. There are no hazardous materials present in the finished product and they pose no issue at disposal. Products are odorless, non-flammable and pose no health hazard.

**HAZARD INGREDIENTS/IDENTITY INFORMATION**

Hazardous Components	Cas No.	Estimated % by Wt.	OSHA PEL mg/m3 (8 Hr-TWA)	ACGIH TLV mg/m3 (8 Hr-TWA)	NIOSH REL mg/m3
Respirable Crystalline Silica (Quartz)	14808-60-7	20-30	<u>10 mg/m3</u> * (%SiO2 + 2)	0.05	0.05

\* The OSHA PEL for respirable dusts containing 1% or greater crystalline silica varies depending on the percentage of crystalline silica found in the air sample according to this formula.

**SECTION III PHYSICAL/CHEMICAL CHARACTERISTICS**

Boiling Point	Not applicable	Specific Gravity (H2O = 1)	2-3
Vapor Pressure (mm Hg)	Not applicable	Melting Point	Not available
Vapor Density (AIR = 1)	Not applicable	Evaporation Rate (Butyl Acetate = 1)	Not applicable
Solubility in Water	Insoluble		
Appearance and Odor	Brittle solid, color may vary, no odor		

**SECTION IV FIRE AND EXPLOSION HAZARD DATA**

Flash Point (Method used)	Not applicable	Flammable Limits	LEL UEL	Not applicable Not applicable
Extinguishing Media	None required, non flammable			
Special Fire Fighting Procedures	None required			
Unusual Fire and Explosion Hazards	None			

**SECTION V REACTIVITY DATA**

Stability Stable

Conditions to Avoid Avoid contact with acids (Hydrofluoric)

**SECTION VI HEALTH HAZARD DATA**

Route(s) of Entry Inhalation Yes

Note Under normal conditions these products do not release hazardous material after installation. There are no hazardous materials present in the finished product and they pose no issue at disposal. Products are odorless, non-flammable and pose no health hazard. Cutting these products may release silica dust. They should only be cut with a wet saw and applicable precautions should be taken to prevent inhalation of dust. Care should also be taken during demolition to prevent dust.

**Acute**

Inhaled Heavy contamination with dust may cause respiratory irritation to nose and throat

Skin Dust or occasional contamination on the skin will cause no adverse effects

Eye Entry of dust into the eyes as a foreign body will cause local irritation

Ingestion Considered an unlikely route of entry in the industrial situation. Non toxic if swallowed.

**Chronic**

Inhaled Repeated exposure by inhalation may cause serious chronic effects which could lead to silicosis, a serious lung disease.

**Carcinogenicity**

NTP Yes

IARC Monographs Yes

OSHA regulated Yes

Crystalline Silica is a known carcinogen and produces a condition known as silicosis in humans

**Signs and Symptoms of Exposure**

The onset of silicosis is usually slow and lung damage may occur even when no symptoms or signs of ill health have occurred. Silicosis can develop to a more serious degree even after exposure has ceased, and may lead to other diseases including heart disease and scleroderma. Development of silicosis may increase the risk of lung cancer.

**Medical Conditions Generally Aggravated by Exposure**

Existing lung disease may be aggravated after exposure to tile dust.

**Emergency and First Aid Procedures**

Inhalation Remove the victim to fresh air if exposed to large amounts of Thin Brick or Tile cutting dust. Administer CPR if breathing has stopped. Keep victim at rest. Call for prompt medical attention

Skin Wash thoroughly with soap and water after working with Thin Brick or Tile.

Eye Immediately flush eyes with large amounts of water for at least 15 minutes if dust gets in eyes. Get medical attention if irritation persists.

Ingestion Seek medical attention if nausea develops.

**SECTION VII Precautions for Safe Handling and Use.**

**Accidental spill or release**

If material is release or spilled avoid creating excessive dust. Clean up dust by vacuum or damp sweeping

**Waste Disposal**

Scrap Thin Brick or Tile should be disposed of in accordance with applicable State and Local regulations.  
Scrap Thin Brick or Tile is not a hazardous waste under U.S.E.P.A. regulations.

**Precautions to be taken in Handling and Storage**

When cutting or grinding, use equipment with integral dust collection and/or local exhaust ventilation.  
Use wet methods if needed to reduce generation of dust.  
Use respiratory protection in the absence of effective engineering controls.  
Shelf life is unlimited.  
Do not store near Hydrofluoric acid. If Thin Brick or Tile contact Hydrofluoric acid there is a limited potential for leaching heavy metals.

**SECTION VIII CONTROL MEASURES**

**Ventilation.**

Use adequate ventilation to keep dust exposure below recommended levels. Avoid inhalation of dust.  
The highest probability of dust exposure occurs during dry cutting, wet cutting methods are recommended

**Respiratory Protection**

Use of properly fitted NIOSH/MSHA approved particulate respirator is recommended when cutting Thin Brick or Tile.

**Personal Protection**

**Eye protection**

Use dust proof goggles or safety glasses with side shields. Contact lenses may absorb irritants.

**Skin Protection**

Cotton or leather work gloves should be worn when cutting this product to minimize skin exposure.  
Wash hands prior to eating, drinking or smoking and at the end of the work shift after cutting operations are conducted.

**NOTE:** Personal protection information in section VIII is based on general information for normal uses and conditions. Where special or unusual uses or conditions exist, it is suggested that the expert assistance of an industrial hygienist or other qualified professional be sought.