

The Digital Brickyard

Summary of Glazed Modular Thin Brick Test Results

Material Description

5/8" Thick Modular Size with a Dovetail Back

Matte and Gloss, Glazed and Printed

Type: TBX (Select) Exterior Grade

PCI Compliant

Glaze Finish & Appearance

Meets ASTM C126 Standard Specification for Ceramic Glazed Structural Clay Facing Tile, Facing Brick, and Solid Masonry Units

Tested in accordance with ASTM C67/C67M-18 Standard Test Methods for Sampling and Testing Brick and Structural Clay Tile

Specifications	Test	Standard	Reported Test Results
Imperviousness	C67/C67M-18	As Reported	No stain could be seen from a distance of five feet.
Opacity	C67/C67M-18	As Reported	No discoloration of the body was visible through the glaze.
Resistance to Crazeing	C67/C67M-18	As Reported	The glaze did not craze, spall or crack.
Resistance to Fading	C67/C67M-18	As Reported	The color and the texture of the glaze did not change.
Scratch Resistance and Hardness	Moh's Hardness	As Reported	Specimens rated above five on the Moh's Hardness Scale.

Brick Substrate

Meets ASTM C-1088 Standard Specification for Thin Veneer Brick Units Made from Clay or Shale

Tested in accordance with ASTM C67/C67M-18 Standard Test Methods for Sampling and Testing Brick and Structural Clay Tile

Specifications	Test	Standard	Reported Test Results
Efflorescence	ASTM C67	None	None
Chipping	ASTM C1088	Max. 3%	< 2%
Size	ASTM C1088	Max. 1%	Meets the Standard
Warpage	ASTM C1088	Max. .5%	Meets the Standard
Modulus of Rupture	ASTM C67	250 lbs./sq.in.	> 500 lbs./sq.in
Compressive Strength	ASTM C67	No Standard	10,000 lbs./sq.in
Absorption	ASTM C67	Max. 5%	< 3%
Saturation Coefficient	ASTM C1088	< 8% - Waived	< 3% - N/A
Freeze- Thaw	ASTM C67	Min. 50 Cycles	Passed - Meets the Standard
Freeze-Thaw Brick in Concrete	ASTM C666 Procedure B	150 PSI or Greater	Passed - Meets the Standard
Shear Bond Strength to Portland Cement	ASTM C482	Min. 50 psi	>150 psi
Chemical Resistance	ASTM C650	Not Affected	Not Affected

11.15.2019

The Digital Brickyard

3436 Fairway Drive|Trussville, Alabama 35173|214-676-5137

SAFETY DATA SHEET

This document has been prepared in accordance with the Occupational Safety and Health Administration (OSHA) Hazard Communication Standard (HCS), 29 Code of Federal Regulations § 1910.1200(g).

SECTION I IDENTIFICATION

PRODUCT IDENTIFICATION

Product Name: Thin Brick and Quarry Tile

RECOMMENDED USE OF CHEMICAL AND RESTRICTIONS ON USE

Product Use: Thin Brick and Quarry Tile are products used as coverings for floors and walls.

MANUFACTURER INFORMATION

Name: Ironrock Capital Inc.

Address: 1201 Millerton Street SE
Canton, Ohio 44707

Telephone Number: 330-484-4887

EMERGENCY TELEPHONE NUMBER

Emergency Telephone Number: 330-484-4887

SECTION II HAZARD IDENTIFICATION

CLASSIFICATION OF THE CHEMICAL IN ACCORDANCE WITH PARAGRAPH (d) OF 29 CFR 1910.1200

Skin Irritation: Not Available

Serious Eye Damage: Not Available

Skin Sensitization: Not Available

GHS Classification (Global Harmonized Standard Classification):

**Specific Target Organ Toxicity
Single Exposure:** Respiratory tract irritation – Category 3 (H335)

**Specific Target Organ Toxicity
Repeated Exposure:** Category 1A (H372)

Carcinogenicity: Category 1A (H350)

SIGNAL WORD (GHS-US)

DANGER

HAZARD STATEMENTS (GHS-US)

May cause cancer (inhalation)
May cause respiratory irritation
Causes damage to organs (lung/respiratory) through prolonged or repeated (inhalation)

HAZARD SYMBOLS (GHS-US)



SAFETY DATA SHEET

PRECAUTIONARY STATEMENTS (GHS-US)

Do not handle until all safety precautions have been read and understood. (P202)
Do not breathe dust/spray. (P260 & P261)
Wash skin thoroughly after handling. (P264)
Do not eat, drink, or smoke when using this product. (P270)
Wear protective gloves, protective clothing, eye protection, face protection. (P280)

HAZARDS NOT OTHERWISE CLASSIFIED

Caution should be used when sawing this product as dust may be released. This dust may contain respirable Crystalline Silica (Quartz). It is recommended that a wet saw be used.

UNKNOWN ACUTE TOXICITY

Not Available

SECTION III

COMPOSITION/INFORMATION ON INGREDIENTS

Thin Brick and Quarry Tile are composed of mixtures of naturally occurring clay and shales fired to at least 1100 degrees C.

Chemical Name:	Respirable Crystalline Silica
Common Names and Synonyms:	Quartz
CAS Number:	14808-60-7
Estimated % by Weight:	20-30

SECTION IV

FIRST-AID MEASURES

DESCRIPTION OF FIRST AID MEASURES

Skin Contact:	Wash thoroughly after working with tiles.
Eye Contact:	Flush eyes with water if dust gets in eyes.
Inhalation:	Heavy contamination with dust may cause respiratory irritation to the nose and throat. Remove the affected person from the area to fresh air. To avoid inhalation risks, do not dry cut this product. Use a wet saw.
Ingestion:	Not applicable for intact tiles.

MOST IMPORTANT SYMPTOMS/EFFECTS, ACUTE AND DELAYED

May cause respiratory irritation. May cause cancer. Causes damage to organs through prolonged or repeated exposure.

INDICATION OF IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED

Not Available

SECTION V

FIRE-FIGHTING MEASURES

These products are not flammable. No fire or explosion hazards exist.

SUITABLE AND UNSUITABLE EXTINGUISHING MEDIA

Not Available

SPECIFIC HAZARDS ARISING FROM CHEMICAL

Not Available

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SPECIAL PROTECTIVE EQUIPMENT AND PRECAUTIONS FOR FIRE-FIGHTERS

Not Available

SECTION VI

ACCIDENTAL RELEASE MEASURES

These products do not release hazardous material.

PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT, AND EMERGENCY PROCEDURES

Use individual protection recommended in Section VIII.

METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP

Avoid creating excessive dust. Clean up dust with a vacuum system with a High-Efficiency Particulate (HEPA) Air Filter vacuum or damp sweeping.

SECTION VII

HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING

When cutting or grinding, use a wet method. If a wet method is not available, use local dust collection or ventilation. Use a respirator when cutting or grinding.

CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES

Shelf life is unlimited. Comply with applicable regulations.

SECTION VIII

EXPOSURE CONTROL/PERSONAL PROTECTION

EXPOSURE LIMITS FOR CRYSTALLINE SILICA

OSHA Permissible Exposure Limit: 50 µg/m³ (micrograms per cubic meter of air) measured as an 8-hour workday (time weighted average or "TWA").

ACGIH Threshold Limit Value: 0.025 mg/m³ (respirable particulate matter)

EXPOSURE CONTROLS

Engineering Controls: Use adequate ventilation to keep dust exposure below recommended levels when cutting. Avoid inhalation of dust. Wet cutting methods and exposure control methods set forth in Table 1 of 29 CFR § 1926.1153 are recommended.

INDIVIDUAL PROTECTION MEASURES

Eye Protection: Use dustproof goggles or safety glasses with side shields when cutting.

Respiratory Protection: Use a properly fitted NIOSH/MSHA approved particulate respirator when cutting.

General Health and Safety Measures: 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.

SECTION IX

PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE (PHYSICAL STATE, COLOR, etc.)

Thin Brick and Quarry Tile is a solid, non-flammable, odorless product. It comes in various colors.

ODOR

Thin Brick and Quarry Tile is odorless.

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ODOR THRESHOLD

Not Available

pH

Not Available

MELTING POINT/FREEZING POINT

Not Available

INITIAL BOILING POINT AND BOILING RANGE

Not Available

FLASH POINT

Not Available

EVAPORATION RATE

Not Available

FLAMMABILITY (SOLID, GAS)

Thin Brick and Quarry Tile is solid, non-flammable. It will not ignite or explode.

UPPER/LOWER FLAMMABILITY OR EXPLOSIVE LIMITS

Not Available

VAPOR PRESSURE

Not Available

VAPOR DENSITY

Not Available

RELATIVE DENSITY

Not Available

SOLUBILITY

Thin Brick and Quarry Tile is not soluble in water, however it should not be used near or contacted with Hydrofluoric acid as it may leach heavy metal residues

PARTITION COEFFICIENT: N-OCTANOL/WATER

Not Available

AUTO-IGNITION TEMPERATURE

Not Available

DECOMPOSITION TEMPERATURE

Not Available

VISCOSITY

Not Available

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SECTION X STABILITY AND REACTIVITY

REACTIVITY

No dangerous reaction known under conditions of normal use.

CHEMICAL STABILITY

Stable.

POSSIBILITY OF HAZARDOUS REACTION

No dangerous reaction known under conditions of normal use.

CONDITIONS TO AVOID

Avoid contact with Hydrofluoric acid.

INCOMPATIBLE MATERIALS

Hydrofluoric acid.

HAZARDOUS DECOMPOSITION PRODUCTS

Not Available

SECTION XI TOXICOLOGICAL INFORMATION

LIKELY ROUTES OF EXPOSURE

Skin contact, eye contact, inhalation, ingestion.

SYMPTOMS RELATED TO PHYSICAL/CHEMICAL/TOXICOLOGICAL CHARACTERISTICS

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

Eye Contact: Entry of dust or chips into the eyes as a foreign body will cause local irritation.

Inhalation: Heavy contamination with dust may cause respiratory irritation to nose and throat. Repeated exposure by inhalation may cause a serious chronic effect which could lead to silicosis, a serious lung disease. The onset of silicosis is usually slow and lung damage may occur without symptoms or signs of ill health. Silicosis can develop to a more serious degree even after exposure has ceased and may lead to other diseases including heart disease. Development of silicosis may increase the risk of lung cancer. To minimize the risk, caution should be taken when sawing or during demolition of Thin Brick and Quarry Tile. Wet cutting, proper ventilation, and the use of a properly fitted NIOSH/MSHA approved particulate respirator is recommended.

Ingestion: Unlikely, but non-toxic if swallowed.

DELAYED, IMMEDIATE, AND CHRONIC EFFECTS OF SHORT AND LONG-TERM EXPOSURE

Short-Term Exposure: Not Available

Long-Term Exposure: The dust generated from cutting Thin Brick and Quarry Tile may release respirable Crystalline Silica, a known carcinogen, and prolonged or repeated inhalation of dust may lead to silicosis and cancer.

NUMERICAL MEASURES OF TOXICITY

Acute Toxicity: Not Available

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NATIONAL TOXICOLOGY PROGRAM REPORT ON CARCINOGENS

Carcinogenicity of Quartz:	National Toxicology Program Status <ul style="list-style-type: none">• Known Human Carcinogens International Agency for Research on Cancer Status <ul style="list-style-type: none">• 1 – The agent (mixture) is carcinogenic to humans OSHA <ul style="list-style-type: none">• OSHA Hazard Communication Carcinogen List
NPT:	Yes
IARC Monographs:	Yes
OSHA:	Yes

SECTION XII

ECOLOGICAL INFORMATION

Thin Brick Quarry Tile produce no environmental hazards.

ECOTOXICITY

Not Available

PERSISTENCE AND DEGRADABILITY

Not Available

BIOACCUMULATIVE POTENTIAL

Not Available

MOBILITY IN SOIL

Not Available

OTHER ADVERSE EFFECTS

Not Available

SECTION XIII

DISPOSAL CONSIDERATIONS

DISPOSAL METHOD

Waste Thin Brick and Quarry Tile should be disposed of in accordance with applicable State and Local regulations. It is not a hazardous waste under United States Environmental Protection Agency regulations.

OTHER DISPOSAL CONSIDERATIONS

Not Available

SECTION XIV

TRANSPORT INFORMATION

There are no hazards in storage or shipping of Thin Brick and Quarry Tile. There are no known regulations or constraints for storing or transporting these products.

UN NUMBER

Not Regulated

UN PROPER SHIPPING NAME

Not Regulated

TRANSPORT HAZARD CLASS

Not Regulated

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PACKING GROUP, IF APPLICABLE

Not Regulated

ENVIRONMENTAL HAZARD

Not Available

TRANSPORT IN BULK ACCORDING TO ANNEX II OF MARPOL 73/78 AND THE IBC CODE

Not Available

SPECIAL PRECAUTIONS FOR USER

Not Available

SECTION XV

REGULATORY INFORMATION

SAFETY, HEALTH, AND ENVIRONMENTAL REGULATIONS/LEGISLATIONS SPECIFIC FOR THE PRODUCT

United States: SDS prepared pursuant to the Hazard Communication Standard (29 CFR § 1910.1200)

SOURCE AGENCY CARCINOGEN CLASSIFICATIONS

OSHA: Occupational Safety and Health Administration
ACGIH: American Conference of Governmental Industrial Hygienists

- A1 – Confirmed human carcinogen

IARC: International Agency for Research on Cancer

- 1 – The agent (mixture) is carcinogenic to humans

NTP: National Toxicology Program

- Known Human Carcinogens

State Regulations:

- Massachusetts – Right To Know List
- New Jersey – Right to Know Hazardous Substance List
- Pennsylvania – RTK (Right to Know) List

SECTION XVI

OTHER INFORMATION

Date of Preparation: December 12, 2014

Date of Revision: January 30, 2018