

**PLIBRICO COMPANY LLC****Safety Data Sheet**

**Refractory Engineers**  
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**Date:** October 29, 2015

<b>SECTION 1—MATERIAL IDENTIFICATION</b>
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<b>Trade Name and Synonyms:</b>	<b>PLISULATE 1900 BLOCK</b>
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<b>Chemical Name, Synonyms and Family:</b> Mineral Wool Block , Mixture	<b>Product Number:</b> 20070, 20071, 20072
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Supplier: Plibrico Company, LLC	Manufacturer: American Fibrex
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<b>SECTION 2 - HAZARDOUS IDENTIFICATION</b>
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**Signal Word: Danger**

**Hazard statement:** H315: Causes skin irritation

H320: Causes eye irritation, H351: Suspected of causing cancer

H335: May cause respiratory irritation

H373: May cause damage to lung through prolonged or repeated inhalation.



**HMIS rating:**

1	HEALTH
0	FLAMMABILITY
0	REACTIVITY
X	PROTECTIVE EQUIPMENT

**This product contains crystalline silica, a substance that has been listed by:**

1. IARC: sufficient evidence for the carcinogenicity of crystalline silica to humans. (Group 1)
2. Canadian WHMIS : D2A - Materials Causing Other Toxic Effects
3. ACGIH: A2-Suspected Human Carcinogen.
4. NTP: a substance known to be a human carcinogen.

Special Notes: \*\*\* Greater amounts of Quartz and Cristobalite may be formed after firing.

Major portion of the crystalline silica present in the product as manufactured is not fine enough to normally be considered respirable.

**Precautionary Statements:**

P260+P261 - Avoid breathing dust/fume/gas/mist/vapors/spray

P280 - Wear eye protection/face protection

P285 - Wear respiratory protection

P305+P351+P338 - If in eyes: Rinse cautiously with water.

P302+P352 - If on skin: Wash with plenty of soap and water.

P501- Dispose of material in accordance with local regulation.

**Primary Route of Entry: Inhalation, Ingestion, Skin Contact**

**Target Organs:** respiratory tract (nose & throat), eyes, skin

**Potential Health Effects:**

**Eyes:** May cause irritation. Abrasive action of dust can damage eye.

**Skin:** May cause irritation

**Ingestion:** May cause gastrointestinal disturbances. Symptoms may include irritation, nausea, vomiting, abdominal pain and diarrhea.

**Inhalation:** Effects of overexposure:

1. Acute: Exposure to nuisance dust may cause temporary irritation or discomfort to skin, eyes, nose, throat or lungs and may aggravate bronchial disorders.
2. Chronic: Long term inhalation of respirable quartz, cristobalite, fused silica and/or amorphous silica may cause silicosis (delayed lung injury) and other respiratory disorders. In addition there is sufficient evidence for the carcinogenicity of crystalline silica to humans.

### SECTION 3 - HAZARDOUS INGREDIENTS

Ingredients	C.A.S. No.	Weight %	TLV ACGIH mg/m <sup>3</sup>	OSHA PEL mg/m <sup>3</sup>	EINECS
Quartz	14808-60-7	< 1	0.05 mg/m <sup>3</sup> (resp. dust)	0.05 mg/m <sup>3</sup> (resp. dust)	238-878-4
Vitreous Mineral fiber	N/A	85	5 mg/m <sup>3</sup> (resp. dust)	5 mg/m <sup>3</sup> (resp. dust)	N/A
Ball Clay	1332-58-7	8	0.1 mg/m <sup>3</sup> (resp. dust)	0.1 mg/m <sup>3</sup> (resp. dust)	265-064-6
Starch	9005-25-8	6	10	5 mg/m <sup>3</sup> (resp. dust)	232-686-4
Colloidal Silica	7631-86-9	1	6	5	231-545-4

### SECTION 4- FIRST AID MEASURES

**Eyes:** Immediately flush eyes with plenty of water and get medical attention.

**Skin:** Wash with soap and water. Get medical attention if irritation develops or persists.

**Ingestion:** If swallowed, seek medical attention.

**Inhalation:** Remove to fresh air. If not breathing, give artificial respiration. Get immediate attention.

If symptoms persist, seek medical attention.

### SECTION 5- FIRE FIGHTING MEASURES

**Unusual Fire and Explosive Hazards:** The product will not burn. Improper mixing and bake-out of materials may result in steam spalling during initial heating. Refer to mixing instructions and bake-out schedules for proper procedures.

**Fire Fighting Equipment:** Fire fighters should wear full protective gear and self-contained breathing apparatus-SCBA.

### SECTION 6- ACCIDENTAL RELEASE MEASURES

**Steps to be taken in case material is released or spilled:** Wear protective clothing as described in Section 8 of this sheet. Use routine housekeeping procedures, avoid dusting, collect material in closed containers or bags.

**Waste Disposal Method:** According to the EPA (40CFR 261.3) wastes are not hazardous wastes. Wastes may be disposed of in a landfill, however, in accordance with federal, state, and local regulations.

### SECTION 7 - HANDLING AND STORAGE

To ensure product quality, store material in a dry place. Minimize dust generation and avoid inhalation and contact with refractory dusts during processing, installation, maintenance and tear-out. After handling of refractory dusts from processing, installation, maintenance or tear-out, wash exposed skin areas thoroughly. Wash clothing contaminated with dusts.

### SECTION 8 - EXPOSURE CONTROL/PERSONAL PROTECTION

**Ventilation:** Local and Mechanical: follow OSHA STD 29 CFR 1910.94.

**Respiratory Protection:** Good ventilation should be provided if dust is created when working with materials. Used material, which is being removed, should be dampened to reduce dust. In addition, when dust is present, workers should employ respirator protection.

**Recommended:** NIOSH approved respirator for dusts and mists, including silica, in compliance with OSHA STD 29.CFR1910.134.

**Protection Gloves:** Protective gloves recommended.

**Eye Protection:** Safety glasses/goggles.

**Other Protective Equipment:** As required to meet applicable OSHA standards.



**Note:** See Section 3 for occupational exposure limit values.

### SECTION 9- PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance &amp; color:</b> light brown solid	<b>Order:</b> Negligible	<b>Vapor Pressure:</b> N/A
<b>Solubility in Water:</b> Slight	<b>Specific Gravity:</b> N/A	<b>Vapor Density:</b> N/A
<b>Flash Point (°):</b> None	<b>pH:</b> N/A	<b>Evaporation Rate:</b> N/A
<b>Flammable Limits:</b> Non-flammable	<b>Explosion Potential:</b> None	<b>% Volatile by Weight:</b> N/A

## SECTION 10 - STABILITY AND REACTIVITY DATA

**Stability :** Stable

**Hazardous Polymerization :** Will not occur

**Incompatibility:** Avoid oxidizing agents, acids, acid chlorides, acid anhydrides

**Hazardous Decomposition Products :** Emits normal combustion products (e.g. CO & CO<sub>2</sub>) & some incomplete combustion products producing smoke & odor if exposed to fire or high temperatures.

## SECTION 11 - TOXICOLOGICAL INFORMATION

Effects of overexposure:

1. Acute: Exposure to nuisance dust may cause temporary irritation or discomfort to skin, eyes, nose, throat or lungs and may aggravate bronchial disorders.
2. Chronic: Long term inhalation of respirable quartz, cristobalite, fused silica and/or amorphous silica may cause silicosis (delayed lung injury) and other respiratory disorders.
3. Prolonged contact with skin may cause irritation.

For crystalline silica (quartz /cristobalite):

**CARCINOGENICITY:** Product contains crystalline silica which may cause delayed respiratory disease (silicosis) if inhaled over a prolonged period of time. IARC concludes that "there is a sufficient evidence for the carcinogenicity of crystalline silica humans." (Group 1).

For aluminum silicate: Aluminum silicate minerals have been found to cause lung fibrosis in the absence of crystalline silica.

## SECTION 12 - ECOLOGICAL INFORMATION

No ecological concerns have been identified.

Not applicable for as-manufactured refractory product. Dusts of as-manufactured refractory product have a low order of aquatic toxicity (rating TLM96: over 1000 ppm), are insoluble, and are not very mobile. Based upon this information, it is not believed to be a significant threat to the environment if accidentally released on land or into water. However, dusts generated during maintenance and tear-out operations may be contaminated with other hazardous substances (e.g. metal). Evaluation of dusts from specific processes should be performed by a qualified environmental professional to determine if an environmental threat exists in the case of a release.

## SECTION 13 - DISPOSAL CONSIDERATIONS

**Waste Disposal Method:** According to the EPA (40CFR261.3) wastes are not hazardous wastes. Wastes may be disposed of in a landfill, however, in accordance with federal, state, and local regulations. However, dusts generated during maintenance and tear-out operations may be contaminated with other hazardous substances (e.g. metals). Therefore, appropriate waste analysis may be necessary to determine proper disposal. Waste characterization and disposal/treatment methods should be determined by a qualified environmental professional in accordance with applicable federal, state and local regulations.

## SECTION 14 - TRANSPORT INFORMATION

Canadian Transportation of Dangerous Goods Regulation: Hazard Class & PIN: Not Regulated

DOT Proper Shipping Name (29 CFR 172.101): Not regulated

DOT Hazard Class (29 CFR 172.101): Not regulated

UN/NA Code (49 CFR 172.101): Not applicable

DOT Labels Required (49 CFR 172.101): Not applicable

DOT Placards Required (49 CFR 172.504): Not applicable

Land Transport ADR/RID (cross-border): Not regulated

Maritime Transport IMDG : Not regulated

Air Transport ICAO-TI and IATA-DGR: Not regulated

**SECTION 15 - REGULATORY INFORMATION**

CANADIAN WHMIS: D2A

CANADIAN EPA: Components of this product are listed on the Domestic Substance List (DSL).

U.S. FEDERAL REGULATIONS:

OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).

SARA TITLE III: EPCRA Section 302 (EHSs):

This product does not contain ingredients subject to reporting requirements of 40 CFR Part 355, Appendices A and B (Extremely Hazardous Substances).

CERCLA Section 304:

This product does not contain ingredients subject to state and local reporting under Section 304 of SARA Title III as listed in 40 CFR Part 302, Table 302.4

SECTION 311/312 HAZARD CATEGORIES:

Product (airborne particulates) is categorized as an immediate (acute) health hazard and a delayed (chronic) health hazard as defined by SARA Title III Section 311/312 (40 CFR 370).

SECTION 313 TOXIC CHEMICALS: None

TSCA: Components of this product are listed on the TSCA Inventory.

**SECTION 16 - OTHER INFORMATION**

Only Trained personnel should use this material.

Abbreviations:

ACGIH: American Conference of Governmental Industrial Hygienists

CAS: Chemical Abstracts Service

CERCLA: Comprehensive Environmental Response, Compensation and Liability Act

DOT: Department of Transportation

EPA: Environmental Protection Agency

IARC: International Agency for Research on Cancer

NFPA: National Fire Protection Association

NIOSH: National Institute for Occupational Safety and Health

NTP: National Toxicology Program

OSHA: Occupational Safety and Health Administration

SARA: Superfund Amendment and Reauthorization Act

WHMIS: Workplace Hazardous Materials Information System (Canada)

**DISCLAIMER**

The information presented herein is presented in good faith and believed to be accurate as of the effective date of this Safety Data Sheet. Occupational exposure limits are under constant review and may be changed at any time. Employers may use this SDS to supplement other information gathered by them in their efforts to assure the health and safety of their employees and the proper use of this product. This summary of the relevant data reflects professional judgment. Employers should note that information perceived to be less relevant has not been included in this SDS. Therefore, given the summary nature of this document, Plibrico Company LLC does not extend any warranty (expressed or implied), assume any responsibility or make any representation regarding the completeness of this information or its suitability for the purposes envisioned by the user. No warranty guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use. In addition, Plibrico Company LLC shall not be liable for injury arising by either misuse of materials, or failure to follow safety procedures as outlined in the safety data sheet.