MATERIAL SAFETY DATA SHEET

A. P. GREEN INDUSTRIES, INC.
GREEN BOULEVARD, MEXICO, MO. 65265
TELEPHONE NUMBER -- 314-473-3626

SECTION I

PRODUCT NAME: DRY MILLED FIRECLAY
PRODUCT TYPE: Raw Fireclay
CHEMICAL FAMILY: $SiO_2 = 56\%$, $Al_2O_3 = 40\%$, $Fe_2O_3 = 1\%$, $TiO_2 = 2\%$, $K_2O = 1\%$ (calcined basis)
FORMULA: Not applicable

SECTION II

PRODUCT HAZARDOUS INGREDIENTS

<table>
<thead>
<tr>
<th>CHEMICAL</th>
<th>TLV-TWA</th>
<th>CAS #</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quartz ($SiO_2$, $&lt;2%$)</td>
<td>0.1 mg/m³³</td>
<td>11808-60-7</td>
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</tbody>
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SECTION III

PHYSICAL DATA

SOLUBILITY IN WATER: Slight
SPECIFIC GRAVITY: Not Applicable
APPEARANCE AND ODOR: Gray, granular; no odor
VOLATILES BY VOLUME (%): N/A
MELTING POINT: Not Applicable

SECTION IV

FIRE AND EXPLOSION HAZARD DATA

FLASH POINT: None
EXTINGUISHING MEDIA: Not Combustible
SPECIAL FIRE FIGHTING PROCEDURES: None
UNUSUAL FIRE AND EXPLOSION HAZARDS: None

SECTION V

HEALTH HAZARD DATA

EFFECT OF OVEREXPOSURE:

EYES ACUTE: Dust can cause mechanical irritation.
CHRONIC: None known.

SKIN ACUTE: None known.
CHRONIC: None known.

INHALATION ACUTE: Dust, if present, may cause upper respiratory irritation.
CHRONIC: Dust may cause lung damage if inhaled on a long-term basis.

INGESTION ACUTE: Unknown.
CHRONIC: Unknown.
Material Safety Data Sheet
Product: DRY MILL ED FIRECLAY

Section V (continued)
EMERGENCY AND FIRST AID PROCEDURES:

EYES: Immediately flush eyes with water for 15 minutes. Consult physician if irritation persists.

SKIN: Not applicable.

INHALATION: Remove to fresh air. Seek medical attention.

INGESTION: Contact physician immediately. Do not induce vomiting unless instructed to do so by physician.

SECTION VI
REACTIVITY DATA

STABILITY: Stable

INCOMPATIBILITY: None known.

HAZARDOUS POLYMERIZATION: Will not occur.

SECTION VII
SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Sweep or shovel up.

WASTE DISPOSAL METHOD: May be disposed of in an approved landfill, in accordance with local, state, and federal regulations.

SECTION VIII
SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION: Use NIOSH approved respirator for dusts when working with dry clay or fired clay.

VENTILATION: General mechanical ventilation is adequate.

EYE PROTECTION: Optional.

OTHER PROTECTION: None.

SECTION IX
SPECIAL PRECAUTIONS

Warning: This product contains crystalline silica. Prolonged exposure to dust may cause silicosis, a progressive pneumoconiosis, or other respiratory diseases. International Agency for Research on Cancer (IARC) has classified crystalline silica as a Class 2A carcinogen. Their study concluded that sufficient evidence for carcinogenicity exists in experimental animals and that limited evidence for carcinogenicity exists in humans.

NIOSH approved respirators should be worn any time that refractories are torn out after service. While some respiratory hazard and or nuisance dust may exist from the product itself, other foreign substances may warrant additional precautions during tearout and disposal.

This material safety data sheet contains confidential proprietary information and is not to be disclosed to the general public or to competition except as required by law. The information accumulated herein is believed to be accurate but is not warranted to be, whether originating with A. P. Green Industries, Inc. or not. This information is offered solely for use in your evaluation of this product in respect to safety, health, and environmental hazards.

Prepared By: Ellia J. Smith
Title: Senior Technical Consultant
Phone: (314) 473-3392