

A. P. GREEN INDUSTRIES, INC.

MEXICO, MISSOURI 65265 U.S.A.

15616

October 10, 1988

MATERIAL SAFETY DATA SHEET

A. P. Green Industries, Inc.
Green Boulevard, Mexico, Missouri 65265
Telephone -- 314-473-3626

SECTION I

PRODUCT NAME: B-503 Grog, B-501 Grog, 564 Grog, 553 Grog, "P" Grog
PRODUCT TYPE: Super Duty Firebrick Grog (All brands)
CHEMICAL FAMILY: SiO₂ = 51-53%, Al₂O₃ = 42-45% FORMULA: Proprietary
Fe₂O₃ = 1-2%, TiO₂ = 1-2%,
K₂O = 1%

SECTION II

PRODUCT HAZARDOUS INGREDIENTS

<u>Chemical</u>	<u>TLV-TWA</u>	<u>CAS #</u>
Cristobalite (SiO ₂)* (0-12%)	0.05 mg/m ³ ** Respirable Dust	14464-46-1

* Not mechanically separate from other mineralogical phases of bricks as made; however, some cristobalite may become mechanically separate when crushing and sizing material as grog.

** Source: American Conference of Governmental Industrial Hygienists, 1988-1989.

SECTION III

PHYSICAL DATA

SOLUBILITY IN WATER: None

SPECIFIC GRAVITY: 2.5

MELTING POINT: Not Applicable

APPEARANCE AND ODOR: Buff to gray granular; no odor

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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 Known

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SECTION V

HEALTH HAZARD DATA

EFFECT OF OVEREXPOSURE:

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

SKIN ACUTE: Can cause cuts or abrasions.
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.

EMERGENCY AND FIRST AID PROCEDURES:

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

SKIN Treat cuts or abrasions using standard first aid procedures.

INHALATION Remove to fresh air. Seek medical attention.

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

SECTION VIREACTIVITY DATA

STABILITY: Stable

INCOMPATIBILITY: None Known

HAZARDOUS POLYMERIZATION: Will Not Occur

SECTION VIISPILL 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 VIIISPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION: Use NIOSH approved respirator for dusts.

VENTILATION: General mechanical ventilation is adequate.

EYE PROTECTION: Safety glasses with side shields should be worn.

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 Refractories or not. This information is offered solely for use in your evaluation of this product in respect to safety, health, and environmental hazards.

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