

A. P. GREEN REFRACTORIES, CO.

MEXICO, MISSOURI 65265 U.S.A.

MAR 03 1988

MATERIAL SAFETY DATA SHEET

A. P. Green Refractories Company
Green Boulevard, Mexico, Missouri 65265
Telephone -- 314-473-3626

SECTION I

PRODUCT NAME: GREENKON 26 Plus

PRODUCT TYPE: Castable Refractory

CHEMICAL FAMILY: SiO_2 = 47-50%, Al_2O_3 = 43-46% **FORMULA:** Proprietary
 CaO = 2-3%, Fe_2O_3 = 1-2%

SECTION II**PRODUCT HAZARDOUS INGREDIENTS**

<u>Chemical</u>	<u>TWA</u>	<u>CAS #</u>
Cristobalite (SiO_2) (5-15%)	0.05 mg/m ³ * respirable dust	14464-46-1
Quartz (SiO_2) (<2%)	0.1 mg/m ³ * respirable dust	14808-60-7
Amorphous Silica (<5%)	20 mppcf*	7631-86-9
Refractory Cement (<10%)	(None) (See SECTION V)	12005-57-1 65997-16-2

* Source: American Conference of Governmental Industrial Hygienists, 1985-1986. The term mppcf means millions of particles per cubic foot of air.

SECTION III**PHYSICAL DATA**

SOLUBILITY IN WATER: Slight **VOLATILES BY VOLUME (%):** Nil

SPECIFIC GRAVITY: 2.7 **MELTING POINT:** Not Applicable

APPEARANCE AND ODOR: Gray, granular mixture; no odor

MAR 03 1988

SECTION IV

FIRE AND EXPLOSION HAZARD DATA

FLASH POINT: None

EXTINGUISHING MEDIA: Material is non-flammable.

SPECIAL FIRE FIGHTING PROCEDURES: None

UNUSUAL FIRE AND EXPLOSION HAZARDS: None

SECTION V

HEALTH HAZARD DATA

EFFECT OF OVEREXPOSURE:

EYES ACUTE: Dust can irritate eyes. Product's cement can cause eye injury.
CHRONIC: Unknown.

SKIN ACUTE: Product's cement can cause skin irritation.
CHRONIC: Unknown.

INHALATION ACUTE: Dust generated can cause breathing discomfort.
CHRONIC: Long-term exposure to dust may cause lung damage.

INGESTION ACUTE: Unknown.
CHRONIC: Unknown.

EMERGENCY AND FIRST AID PROCEDURES:

EYES Flush with clean water for 15 minutes. If irritation occurs, consult physician.

SKIN Wash with soap and water. If irritation occurs, consult physician.

INHALATION Remove to fresh air. Seek medical attention.

INGESTION Contact physician immediately. Do not induce vomiting unless instructed to do so by physician. Product is non-toxic as supplied, but its abrasive nature could damage internal organs.

MAR 03 1988

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: If dry, predampen and sweep or shovel up. If wet (after mixing with water for use), sweep or shovel up.

WASTE DISPOSAL METHOD: In the as-supplied condition, product can 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 when working around dried material or when removing this product after service.

VENTILATION: General mechanical ventilation is usually adequate.

EYE PROTECTION: Goggles or safety glasses with side shields should be worn.

OTHER PROTECTION: Gloves and long sleeved and long legged clothing should be worn to prevent skin contact. Safety shoes should be worn to prevent foot injury from accidentally dropped bags of castable.

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.

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