PLEASE CHECK THE MANUFACTURER'S EWEBSITE FOR THE MOST CURRENT VERSION OF ALL MATERIAL SAFETY DATA SHEETS

MATERIAL SAFETY DATA SHEET

Date: 01/26/98

Nos. 3297
3904, 3102

A. P. GREEN REFRACTORIES, INC.
and Subsidiaries
GREEN BOULEVARD, MEXICO, MO 65265

Emergency Telephone Number — Call 573-473-3626
Transportation Emergencies — Contact CHEMTREC at 800-424-9300
International Emergencies — Contact CHEMTREC at 703-527-3887
Health Emergencies — Contact Your Local Poison Center

SECTION I

PRODUCT NAME:		
	INSWOOL® BLANKET	INSWOOL® BULK
	INSWOOL®-HP BLANKET	INSWOOL®-HP BULK
	INSWOOL®-HP-M BLANKET*	INSWOOL®-HP-M BULK*
	INSWOOL®-HT BLANKET	INSWOOL®-HT BULK
	INSWOOL®-HT-M BLANKET*	INSWOOL®-HT-M BULK*
	INSWOOL®-LT BLANKET	INSWOOL®-LT BULK
	INSWOOL®-LT-M BLANKET*	INSWOOL®-LT-M BULK*
	INSWOOL -M BLANKET	INSWOOL®-M BULK
		INSWOOL MODULE BE-104

PRODUCT TYPE: Refractory Ceramic Fiber Blanket or Bulk

Canadian WHMIS Classification: D,2

NFPA Rating: 1-0-0

CHEMICAL FAMILY: Not Applicable

FORMULA: Not Applicable

*Manufactured in the Republic of Mexico.

SECTION II
PRODUCT HAZARDOUS INGREDIENTS

CHEMICAL	TLV-TWA	CAS #
Refractory Ceramic Fiber (Al_2O_3-SiO_2) (100%)	1 fiber/cc*	142844-00-6

*A. P. Green workplace exposure guideline. See also Section III.

SECTION III
HAZARDS INFORMATION

American Conference of Governmental Industrial Hygienists (ACGIH) is proposing a TLV-TWA of 0.1 to 0.5 fibers/cc for Refractory Ceramic Fiber.

International Agency for Research on Cancer (IARC) has classified Refractory Ceramic Fiber as 2B — possibly carcinogenic to humans.

As supplied, product contains no crystalline silica; however, when exposed to temperatures above 1800°F (982°C) during service, cristobalite, a form of crystalline silica, may form. 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 Group 1. The agency states there is sufficient evidence of carcinogenicity in humans. Reference: IARC Monograph 68.

Dust from product at any stage of its use or during tear-out after service may, especially on long exposure, lead to lung disease unless respiratory protection is employed. NIOSH approved respirators should be worn any time that refractories are torn out after service. While a respiratory hazard and/or nuisance dust may exist from the product itself, other foreign substances may warrant additional precautions during tearout and disposal.

Contact between refractory ceramic fibers and skin may result in transitory skin rash. Susceptibility varies with individuals, with some individuals showing no susceptibility.

SECTION IV
FIRST AID MEASURES

EFFECT OF OVEREXPOSURE:

EYES:	ACUTE:	Causes mechanical irritation.
	CHRONIC:	None Known
SKIN:	ACUTE:	May cause skin irritation.
	CHRONIC:	None Known
INHALATION:	ACUTE:	Dust generated can cause breathing discomfort.
	CHRONIC:	Long-term exposure to dust may cause lung damage.
INGESTION:	ACUTE:	Unknown
	CHRONIC:	Unknown

FIRST AID MEASURES:

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.

SECTION V
FIRE FIGHTING MEASURES

FLAMMABLE PROPERTIES: Non-Flammable

EXTINGUISHING MEDIA: Not applicable for product.

FIRE FIGHTING INSTRUCTIONS: No special instructions.

UNUSUAL FIRE AND EXPLOSION HAZARDS: None

SECTION VI
ACCIDENTAL RELEASE MEASURES

SMALL/LARGE SPILL: Dampen, then pick up or scoop up and place in a container for disposal.

SECTION VII
HANDLING AND STORAGE

Store in a dry place, away from extreme heat. Product is non-flammable, but packaging is combustible.

SECTION VIII
EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS: Use adequate ventilation to meet exposure controls (SECTION II).

RESPIRATORY PROTECTION: Use a NIOSH approved respirator for mineral dusts when working with this product.

EYE PROTECTION: Use safety glasses with side shields to avoid eye contact.

SKIN PROTECTION: Wear impervious gloves and long-sleeved clothing to avoid skin contact. Cleanse exposed skin after any contact.

OTHER: Wash work clothing separately; rinse washing machine thoroughly after use.

SECTION IX
PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE:	White to Off-White Fiber, in Blanket or Bulk Form		
BOILING POINT:	Not Applicable	**pH:**	7
SOLUBILITY IN WATER:	None	**ODOR:**	None
SPECIFIC GRAVITY:	Not Applicable	**MELTING POINT:**	Not Applicable

SECTION X
STABILITY AND REACTIVITY

Product is stable under normal conditions of use, storage, and transportation.

Product can react with concentrated acids.

SECTION XI
TOXICOLOGICAL INFORMATION

LD_{50} or LC_{50} for oral, dermal, or inhalation routes of administration: no data for product.

SECTION XII
ECOLOGICAL INFORMATION

Ecotoxicological/chemical fate information: not available.

SECTION XIII
DISPOSAL CONSIDERATIONS

As supplied, product may be disposed of in an approved landfill, in accordance with federal, state, and local regulations.

Supplier can make no statement concerning disposal of used product, since product may become contaminated by hazardous materials during use.

SECTION XIV
TRANSPORT INFORMATION

U.S.A. DOT: Not Regulated
Canadian TDG Hazard Class & PIN: Not Regulated

SECTION XV
REGULATORY INFORMATION

TSCA Status: All Components Listed
Canadian DSL: All Components Listed
SARA Title III, Section 313: This MSDS provides the toxic chemical "SUPPLIER INFORMATION" required under Section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 and 40 CFR 372. Toxic chemical information, if applicable to the product(s) named, is located in **Section II - HAZARDOUS INGREDIENTS** section of the MSDS. This information is subject to the toxic chemical reporting requirements of Section 313 and must be included in all MSDSs that are copied and distributed for this product.

SECTION XVI
OTHER INFORMATION

MSDS Status: Replaces MSDS Dated 08/01/97

Note: 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, 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: Ellis J. Smith
Senior Technical Consultant
Phone: 573-473-3392