MATERIAL SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

ATLANTA SPECIAL PRODUCTS INC
P.O. BOX 359
WASCO, IL 60183
Phone: 630-377-1750
Fax: 630-377-0274

FOR EMERGENCY INFORMATION CALL
ASP PRODUCT STEWARDSHIP
1-800-327-3552

PRODUCT NAME	PART NUMBERS	PRODUCT TYPE	DOT SHIPPING
Flame-Gard	**2400, 2500 & 2600**	**Heat & Flame Barrier**	**Not Regulated**

2. COMPOSITION / INFORMATION ON INGREDIENTS

See the table below for product ingredients, CAS numbers, exposure limits and Section 313 Reporting.
See section 9, "REGULATORY DATA" for CALIFORNIA PROPOSITION 65 information.

INGREDIENTS PRESENT IN PRODUCT

Ingredients	CAS Number	OSHA PEL (mg/M^3)	ACGIH TLV (mg/M^3)	Section 313 Reporting	% (Optional)
Vitreous Aluminosilicate Fibers	142844-00-6	15 (as total)	NE	NA	ND
Aluminum	7429-90-5	15 (as total)	10	NA	ND

NA = Not Applicable, ND = Not Disclosed, NE = Not Established

3. HAZARDS IDENTIFICATION

WARNING! POSSIBLE CANCER HAZARD BY INHALATION; although studies involving occupationally exposed workers have not identified any increased incidence of respiratory disease, results from animal testing have been used as the basis for hazard classification. In each of the following cases, the conclusions are qualitative only, and do not rest upon any quantitative analysis suggesting that the hazard actually may occur at the current occupational exposure levels. There has been no increased incidence of respiratory disease in studies examining occupationally exposed workers. In animal studies, long term laboratory exposure to doses hundreds of times higher than normal occupational exposures has produced fibrosis, lung cancer and mesothelioma in rats or hamsters. The fibers used in those studies were specially sized to maximize rodent respirability.

The **International Agency for Research on Cancer (IARC)** confirmed in October 2001 that Group 2B (possible human carcinogen based on sufficient evidence of carcinogenicity in animals but inadequate evidence in humans) continues to be the appropriate classification for refractory ceramic fiber (RCF).

The Seventh Annual Report on Carcinogens (1994), prepared by the **National Toxicology Program (NTP)**, classified respirable RCF and glasswool as substances reasonably anticipated to be carcinogens.

The **American Conference of Government Industrial Hygienists (ACGIH)** has classified RCF as "A2-Suspected Human Carcinogen."

The **Commission of The European Communities (DG XI)** has classified RCF as a substance "that should be regarded as if it is carcinogenic to man."

11-1986

The **State of California**, pursuant to Proposition 65, The Safe Drinking Water and Toxic Enforcement Act of 1986, has listed "ceramic fibers (airborne fibers of respirable size)" as a chemical known to the State of California to cause cancer.

The **Canadian Environmental Protection Agency (CEPA)** has classified RCF as "probably carcinogenic" (Group 2).

The **Canadian Workplace Hazardous Materials Information System (WHMIS)** - RCG is classified as Class D2A – Materials Causing Other Toxic Effects.

This product, used as intended, may cause temporary mild irritation to sensitive skin. Pre-existing skin and respiratory conditions may be aggravated by exposure.

4. PHYSICAL / CHEMICAL CHARACTERISTICS

This product as shipped is non-hazardous, non-flammable, non-explosive and non-reactive.

Rating in accordance with NFPA code 704: Health 1*; Flammability 0; Reactivity 0
(*denotes potential for chronic effects)

Boiling Point (F°)	NA	**Specific Gravity (H_2O=1):**	NE
Vapor Pressure (mm Hg.):	NA	**Melting Point:**	1760°C (3200°F)
Vapor Density (Air=1):	NA	**Evaporation Rate (H_2O=1):**	NA
Solubility in Water:	Not soluble in water	**PH:**	NA

Appearance and Odor: White, odorless, light density fibrous batting with thin metallic backing.

5. FIRE AND EXPLOSION HAZARD DATA

NON-FLAMMABLE: Fuel gas torches and soldering irons used for welding, brazing and soldering operations and welding arcs and sparks can ignite combustibles. Refer to American National Standard Z49.1 for fire prevention during welding.

Extinguishing Media: Product is non-flammable. Extinguishing media is dependent on fire type.
Special Fire Fighting Procedures: None
Unusual Fire & Explosion Hazards: None

6. REACTIVITY DATA / HAZARDOUS DECOMPOSITION PRODUCTS

Incompatibility: None

Hazardous Decomposition Products: Trace amounts of cristobalite, a form of respirable silica may be formed when Flame-Gard is used at temperatures above 1800°F for extended periods of time. TLV for cristobalite (CAS 14464-46-1) = 0.05 mg/M^3 (ACGIH). See Section 9, "REGULATORY DATA" for information on respirable silica. One recommended way to determine the composition and quantity of fumes and gases to which workers are exposed is to take an air sample inside the welder's helmet, if worn, or in the worker's breathing zone. See ANSI/AWS F1.1, available from the American Welding Society, PO Box 351040, Miami FL 33135.

7. HEALTH HAZARD DATA

Threshold Limit Value: See Section 2 for TLV's for ingredients of this product. The ACGIH recommended general limit for welding fume NOC (Not Otherwise Classified) is 5 mg/M^3. The ACGIH 1984-85 preface states; "The TLV-TWA should be used as guides in the control of health hazards and should not be used as firm lines between safe and dangerous concentrations." See Section 6 for specific fume constituents, which may modify this TLV.

Effects of Overexposure: FUMES AND GASES generated during use of this product, in conjunction with heating, welding, brazing or soldering procedures, can be dangerous to your health. Aggravation of preexisting respiratory or allergic conditions may occur in some workers. SHORT-TERM (ACUTE) OVEREXPOSURE may cause minor skin irritation/dryness. LONG-TERM (CHRONIC) OVEREXPOSURE to nuisance dust from products may cause benign or inert pneumoconiosis or cough. ARC RAYS can injure eyes and burn skin. ELECTRIC SHOCK can kill. See section 8.

Medical Conditions Generally Aggravated by Exposure: May aggravate skin and respiratory problems.

Primary Routes of Entry:	Acute and Chronic Health Effects & Effects of Overexposure:	First Aid and Medical Information:
Inhalation:	Contact with fumes or free fibers may cause temporary upper respiratory irritation.	Remove from area of exposure to location with fresh air.
Skin Contact:	Contact with free fibers may cause temporary irritation.	Wash effected areas with soap and water. Apply suitable skin lotion.
Eye Contact:	Contact with free fibers may cause temporary eye irritation.	Flush eyes with water for at least 15 minutes. Seek medical aid.
Ingestion:	Not normal route of entry. DO NOT INGEST.	DO NOT INDUCE VOMITING. Seek medical advice.

Emergency & First Aid Procedures: Call for medical aid. Employ first aid techniques recommended by the American Red Cross.

8. PRECAUTIONS FOR SAFE HANDLING & USE / APPLICABLE CONTROL MEASURES

Read and understand the manufacturer's instructions and the precautionary label on this product.

Storage and Handling: Store in provided product container in a dry place to maintain product quality. Avoid contact with eyes, skin or clothing. Limit the use of power tools, unless in conjunction with local exhaust. Use good housekeeping practices to prevent accumulation of dust or fumes. Wash hands after handling. Do not smoke, eat or drink in work area. Do not use compressed air for clean-up.

Ventilation: Trace amounts may burn off during exposure to high heat. Use enough ventilation, local exhaust at work area, or both, to keep the dust, fumes and gases below the TLV's in the worker's breathing zone and the general area. Train the worker to keep his/her head out of the fumes.

Respiratory Protection: Use NIOSH approved dust respirator or air supplied respirator when using product in confined space or when welding, brazing or soldering in confined space or where local exhaust or ventilation does not keep exposure below TLV.

Eye Protection: Use of safety glasses or goggles recommended when using this product to prevent particles getting into the eyes. Use proper protection if welding, brazing or soldering. Provide protective screens and flash goggles, if necessary, to shield others. When working with chemicals or polymer products, a safety eyewash station should be in close proximity.

Protective Clothing: Use gloves and aprons to avoid prolonged or repeated skin contact with chemicals and to protect clothing. When using product in conjunction with welding, brazing or soldering operation, wear head, hand

and body protection which help prevent injury form radiation, sparks, heat and electrical shock. See ANSI Z49.1. At a minimum, this includes gloves and a protective face shield and may include arm protectors, aprons, hats, shoulder protection, as well as dark substantial clothing. Train the worker not to touch hot metals or live electrical parts and to insulate himself from work and ground.

Procedure for Cleanup of Spills or Leaks: Avoid creating airborne dust. Use dust suppressing cleaning methods such as wet sweeping or vacuuming should be used to clean the work area. If vacuuming, the vacuum should be equipped with HEPA filter. Compressed air or dry sweeping should not be used for cleaning.

Waste Disposal Method: Prevent waste from contaminating surrounding environment. Discard any product, residue, disposable container, or liner in an environmentally acceptable manner, in full compliance with Federal, State and Local Regulations.

9. REGULATORY DATA

TSCA: No listed components
OSHA: Not regulated
CERCLA: No reportable ingredients
RCRA: No reportable ingredients

SARA TITLE III:
Section 302: No reportable ingredients
Section 311: No reportable ingredients
Section 312: No reportable ingredients
Section 313: No reportable ingredients

CALIFORNIA: PURSUANT TO PROPOSITION 65: WARNING; Flame-Gard contains vitreous ceramic fiber material that does not contain crystalline silica, however continued exposure to elevated temperatures over 1800° F may cause these fibers to devitrify and form trace amounts of cristobalite, a form of respirable silica. The extent of which this material is formed is dependant on duration and temperature. Free respirable silica has been listed as a suspected human carcinogen by NTP and IARC. Prolonged exposure and repeated inhalation of free respirable silica may lead to silicosis or other serious delayed lung injury. Ceramic fibers (airborne particles of respirable size) is listed in Proposition 65, The Safe Drinking Water and Toxic Enforcement Act of 1986 as a chemical known to the State of California to cause cancer. (California Health & Safety Code 25249.5 et. Seq.)

10. ECOLOGICAL DATA

Mineral components are inert and may be introduced into the environment without consequence.

11. PREPARATION INFORMATION

The information contained herein is based on data considered accurate. However, no warranty is expressed or implied regarding the accuracy of this data or the results to be obtained from the use thereof.

Vendor assumes no responsibility for injury to vendee or third persons proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in the data sheet. Additionally, vendor assumes no responsibility for injury to vendee or third persons proximately caused by abnormal use of this material even if reasonable safety procedures were followed. Furthermore, vendee assumes the risks in his use of the material.

MSDS Number: 2400 **Revision:** 1.0 **Date Revised:** 03/25/2008 **Date Issued:** 04/01/2008

Reason for Revision: Initial document issue for this product.

Written By: ASP Product Stewardship