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

<table>
<thead>
<tr>
<th>PRODUCT NAME</th>
<th>PART NUMBER</th>
<th>PRODUCT TYPE</th>
<th>DOT SHIPPING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hot Dam</td>
<td>9000</td>
<td>Heat Sink Compound</td>
<td>Not Regulated</td>
</tr>
</tbody>
</table>

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.

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>CAS Number</th>
<th>OSHA PEL (mg/M^3)</th>
<th>ACGIH TLV (mg/M^3)</th>
<th>Section 313 Reporting</th>
<th>% (Optional)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vitreous Aluminosilicate Fibers</td>
<td>142844-00-6</td>
<td>NE</td>
<td>NE</td>
<td>NA</td>
<td>ND</td>
</tr>
<tr>
<td>Aliphatic Hydrocarbon</td>
<td>6472-55-8</td>
<td>5</td>
<td>5</td>
<td>NA</td>
<td>ND</td>
</tr>
<tr>
<td>Polycrystalline Polymer</td>
<td>25987-30-8</td>
<td>NE</td>
<td>NE</td>
<td>NA</td>
<td>ND</td>
</tr>
<tr>
<td>Sodium Hydroxymethyglycinate</td>
<td>70161-44-3</td>
<td>NE</td>
<td>NE</td>
<td>NA</td>
<td>ND</td>
</tr>
<tr>
<td>Monoethanolamine</td>
<td>9016-45-9</td>
<td>NE</td>
<td>NE</td>
<td>NA</td>
<td>ND</td>
</tr>
<tr>
<td>Ferric Oxide</td>
<td>1309-37-1</td>
<td>10</td>
<td>5</td>
<td>NA</td>
<td>ND</td>
</tr>
<tr>
<td>Barium Sulfate</td>
<td>7727-43-7</td>
<td>10</td>
<td>10</td>
<td>NA</td>
<td>ND</td>
</tr>
<tr>
<td>Aqua</td>
<td>7732-18-5</td>
<td>NE</td>
<td>NE</td>
<td>NA</td>
<td>ND</td>
</tr>
</tbody>
</table>

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

3. HAZARDS IDENTIFICATION

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

Boiling Point (°F): N/A
Vapor Pressure (mm Hg.): 0.2-1.2
Vapor Density (Air=1): N/A
Solubility in Water: None
Appearance and Odor: Red, tacky, fibrous paste with slight hydrocarbon odor.
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:** Hot Dam may be incompatible with strong oxidizers and acids.

**Hazardous Decomposition Products:** Carbon monoxide, carbon dioxide, oxides of nitrogen and reactive hydrocarbons may accompany initial binder burn-off. Trace amounts of cristobalite, a form of respirable silica may be formed when Hot Dam is used at temperatures above 1800° F for extended periods of time. TLV for cristobalite (CAS 14464-46-1) = 0.05 mg/M³ (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/M³. 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.

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

**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 tightly closed container in a cool, dry place to maintain product quality, do not freeze. Avoid contact with eyes, skin or clothing. Use good housekeeping practices to prevent accumulation of dust or fumes. Wash hands after handling. Do not smoke, eat or drink in work area.

Ventilation: Trace amounts of organic binders will burn off during the first exposure to 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 form work and ground.

Procedure for Cleanup of Spills or Leaks: Collect spilled material with a spatula type instrument for reclamation and reuse or disposal in sealed containers. Keep airborne dust at a minimum when cleaning up by vacuuming residue when possible.

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: Components listed
OSHA: Not regulated

CERCLA: No reportable ingredients
RCRA: No reportable ingredients

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

CALIFORNIA: PURSUANT TO PROPOSITION 65: WARNING. Hot Dam 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

Organic components and soluble inorganic components are 100% biodegradable. Mineral component is 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: 9000   Revision: 1.0   Date Revised: 02/15/2008   Date Issued: 03/01/2008

Reason for Revision: Minor change to formulation, change to company identification, change to document format and change to document identification & revision numeration.

Written By: ASP Product Stewardship

12. DEFINITIONS

ACGIH  American Council of Governmental Industrial Hygienists
ANSI  American National Standards Institute
AWS  American Welding Society
CAS  Chemical Abstracts Service
CERCLA  Comprehensive Environmental Response, Compensation and Liability Act
DOT  Department of Transportation
EPA  Environmental Protection Agency
IARC  International Agency for Research on Cancer
mg/M³  Milligrams per Cubic Meter of Air
MSDS  Material Safety Data Sheet
NA  Not Applicable
ND  Not Disclosed
NE  Not Established
NFPA  National Fire Protection Association
NIOSH  National Institute for Occupational Safety and Health
NTP  National Toxicology Program
OSHA  Occupational Safety and Health Administration
PEL  Permissible Exposure Limit (OSHA)
RCRA  Resource Conservation and Recovery Act
SARA Section 311  MSDS/List of Chemicals and Hazardous Inventory
SARA Section 312  Emergency and Hazardous Inventory
SARA Section 313  Toxic Chemicals and Release Reporting
TLV  Threshold Limit Value (ACGIH)
TSCA  Toxic Substances Control Act
TWA  Time Weighted Average

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