



## **MATERIAL SAFETY DATA SHEET**

### **SECTION 1: PRODUCT AND COMPANY IDENTIFICATION**

**Product Name:** Gas Tank Heat Shield**Manufacturer:**Federal Mogul Corporation  
26555 Northwestern Highway  
Southfield, MI 48033**24hr Emerg # (Infotrac): 1-800-535-5053****International: 001-352-323-3500****Non-Emerg #: 248-354-9844**

### **SECTION 2: COMPOSITION/INFORMATION ON HAZARDOUS INGREDIENTS**

Although several of the ingredients used to formulate this product may be hazardous in their raw state, the manufacturing process results in a solid, infusible form, binding or otherwise rendering the mixture inert. We have identified below those hazardous constituents present in quantities greater than 1% (0.1% for carcinogens) that may be released from the product by overheating, burning, cutting, or abrading.

<b>Ingredient</b>	<b>CAS No.:</b>	<b>% Weight</b>	<b>OSHA PEL</b>	<b>ACGIH TLV (2004)</b>
Acrylic-hybrid adhesive (containing elastomers)	None	<50	None Established	None Established
Aluminum (foil)	7429-90-5	<50	15 mg/m <sup>3</sup> <sup>a, b</sup>	10 mg/m <sup>3</sup>
Glass Fiber	65997-17-3	<50	None Established	1 fiber/cc <sup>c</sup> (A3)

<sup>a</sup>: Milligrams of compound per cubic meter of sampled air, on a weight-to-volume basis

<sup>b</sup>: As total particulate (not otherwise regulated)

<sup>c</sup>: As synthetic vitreous fibers per cubic centimeter of sampled air

A3: ACGIH has classified glass fiber as a confirmed animal carcinogen with unknown relevance to humans.

OSHA Regulatory Status: This product is classified as hazardous under OSHA regulations.

### **SECTION 3: HAZARDS IDENTIFICATION**

#### **EMERGENCY OVERVIEW**

Shipped heat shield materials are not considered hazardous, but operations (overheating, burning, cutting, abrading, or riveting) that can create airborne dust or fibers should be avoided. Such operations could cause exposures in excess of permissible exposure limit for the respective ingredient and should be considered hazardous.

#### **POTENTIAL HEALTH EFFECTS**

**Inhalation:** Dust or fibers may cause irritation. Repeated inhalation of dust or fibers may affect a variety of organs (See Chronic Section below).

**Skin:** May cause irritation. Prolonged skin contact may cause skin sensitization and/or dermatitis.

**Eye:** Dust or fibers may cause irritation and redness. Particles may scratch the eye.

**Ingestion:** Ingestion may cause irritation, nausea, vomiting, and diarrhea.

**Chronic:** Repeated inhalation of dust and fibers may cause fibrotic lung disease and increased risk of sinus and respiratory cancer.

**POTENTIAL HEALTH EFFECTS (continued)****Carcinogenicity:**

	<b>COMPONENT</b>
	<b>NTP</b>
	<b>IARC</b>
	<b>OSHA</b>
Glass Fiber (glass filament)	Yes
	3
	No
Acrylic-hybrid adhesive, Aluminum	No
	No
	No

**Signs and Symptoms:** Skin may become red and itchy with repeated contact. Gastrointestinal effects may result in nausea, abdominal pain, diarrhea, constipation, and vomiting.

**Medical Conditions Aggravated by Exposure:** Pre-existing skin and respiratory system disorders.

**Target Organs:** Skin, eyes, lungs.

**Symptoms and Effects of Exposure to Selected Individual Components****ACRYLIC-HYBRID ADHESIVE (CONTAINING ELASTOMERS)**

**Inhalation hazards** – There are no reported serious health risks from exposure.

**ALUMINUM**

**Inhalation hazards** – Acute: Exposure to alumina may cause coughing and shortness of breath.

Chronic: Prolonged exposure may affect breathing capacity.

**Other hazards** – Ingestion is not recommended, but adverse effects have not been reported. Alumina is not absorbed through the skin, but contact may cause abrasion. Dust or fibers may irritate eyes.

**GLASS FIBERS**

**Inhalation hazards** – Continuous filament fibrous glass is a mechanical irritant. Breathing dusts and fibers may cause short-term irritation of the mouth, nose and throat. Long-term breathing effects or skin conditions that are aggravated by mechanical irritants may be at a higher risk of worsening from use or contact with this product.

**Other hazards** – Skin contact with dust and fibers may cause itching and short-term irritation. Ingestion may cause short-term mechanical irritation of the stomach and intestines.

**SECTION 4: FIRST AID MEASURES**

**Ingestion:** Seek medical attention.  
**Inhalation:** Move to fresh air. Seek medical attention.  
**Eye Contact:** Flush with water to remove particulate/fibers. Seek medical attention.  
**Skin Contact:** Wash thoroughly with soap and water. If persistent irritation develops, seek medical attention.

**SECTION 5: FIRE FIGHTING MEASURES**

**Flashpoint:** N/A      **LEL:** N/A      **UEL:** N/A      **Autoignition Temperature:** This product is inherently flame resistant, but may ignite at temperatures exceeding 1,112°F (600°C) in an oxygen-enriched atmosphere.

**Extinguishing Media:** Use media suitable for surrounding fire.

**Unusual Fire and Explosion Hazards:** None

**Special Fire Fighting Procedures:** Heating to very high temperatures may result in toxic decomposition products (See Section 10).

**SECTION 6: ACCIDENTAL RELEASE MEASURES**

If a release of dust occurs during machining, abrading, or riveting, remove dust by vacuuming or wet mopping. Vacuums used for this purpose should be equipped with HEPA filters. Do not use compressed air to blow dust in the workplace.

**SECTION 7: HANDLING AND STORAGE**

Store in a dry place. Shipping and storage may result in accumulation of dust or fibers in shipping containers. If this occurs, dispose of the container in an airtight bag (see disposal instructions below) or remove dust or fibers by vacuuming or wet mopping. Vacuums used for this purpose should be equipped with HEPA filters. Do not use compressed air to blow dust or fibers from storage containers.

**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Ventilation Protection:** Any operation which may produce dust or fibers, including machining, grinding, riveting, or abrading this product, should be adequately exhausted to prevent inhalation of dust or fibers.

**Respiratory Protection:** Use a NIOSH-approved respirator if there is a potential for exposure to dust, vapor, fiber, or fume exceeding PELs or TLVs. (See 29 CFR 1910.134, respiratory protection standard).

**Skin Protection:** If skin irritation occurs, gloves and other protective garments may be worn.

**Eyes:** Wear safety glasses or goggles, as necessary, if dust or fiber exposure is possible.

**Other:** None known.

**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

<b>Boiling Point:</b>	N/A	<b>Vapor Pressure:</b>	N/A
<b>Melting Point:</b>	N/A	<b>Vapor Density (air = 1):</b>	N/A
<b>pH:</b>	N/A	<b>% Volatile:</b>	N/A
<b>Specific Gravity:</b>	2.00 – 3.70 g/cc	<b>Evaporation Rate:</b>	N/A
<b>Water Solubility:</b>	Insoluble	<b>Appearance and Odor:</b>	Solid, phenolic

**SECTION 10: STABILITY AND REACTIVITY**

**Stability:** Stable at normal temperatures and storage conditions.

**Incompatibility (Materials/Conditions to Avoid):** None.

**Hazardous Polymerization:** Will not polymerize. This product is fully cured in the manufacturing process.

**Decomposition Products:** Oxides of carbon, nitrogen and sulfur; other trace organic compounds.

**SECTION 11: TOXICOLOGICAL INFORMATION**

**Inhalation:** Refer to Section 3

**Skin:** Refer to Section 3

**Eye:** Refer to Section 3

**Ingestion:** Refer to Section 3

**Acute:** Skin and eye irritation may occur with repeated contact to dust or fibers.

**Chronic:** This product is a mixture of chemicals physically bonded together. Therefore, in the "as supplied" state, this product is considered non-hazardous. In the event that dust or fiber is generated, some of the ingredients can have acute and chronic effects (See Section 3 for details).

**SECTION 12: ECOLOGICAL INFORMATION**

None known.

**SECTION 13: DISPOSAL CONSIDERATIONS**

Federal and state law regulates disposal of solid waste. Waste should be placed in airtight containers. Disposal must be in accordance with 49CFR261, 40CFR262, and applicable state and local regulations.

**SECTION 14: TRANSPORTATION INFORMATION**

<b>Proper Shipping Name:</b>	Not regulated
<b>Hazard Class:</b>	None
<b>Identification Number:</b>	None
<b>Packing Group:</b>	N/A
<b>Shipping Label:</b>	None
<b>Additional Marking Requirement:</b>	None

**SECTION 15: REGULATORY INFORMATION**

**U.S. TSCA:** All chemicals used in the manufacture of this product are listed on the U.S. Toxic Substances Control Act (TSCA) Inventory.

**California Proposition 65:** This product contains ingredients known to the State of California to cause cancer, birth defects or other reproductive effects.

**SARA Title III – Section 313 Supplier Notification:** This product does not contain chemicals subject to SARA Title III/CERCLA “reportable quantities” (RQs) and/or “threshold planning quantities” (TPQs) and/or are classified as “Toxic Chemicals” under the Emergency Planning and Community Right-To-Know Act (EPCRA) of 1986 and 40 CFR 372.

**RCRA Hazardous Waste Code:** Not Available

**CERCLA Hazardous Substances:** Not Available

**OSHA:** Not Available

**WHMIS Classification:** Not Available

**SECTION 16: OTHER INFORMATION**

Abbreviations:

CAS #:	Chemical Abstract Services Number
OSHA PEL:	U.S. Occupational Safety and Health Administration Permissible Exposure Limit
ACGIH TLV:	American Conference of Governmental Industrial Hygienists Threshold Limit Value (2004)
fibers/cc:	Fibers per cubic centimeter of air
mg/m <sup>3</sup> :	Milligrams of contaminant per cubic meter of air, on a weight-to-volume basis
N/A:	Not Applicable
NIOSH	National Institute for Occupational Safety and Health
IARC:	International Agency for Research on Cancer
NTP:	National Toxicology Program
HEPA:	High-Efficiency Particulate Air

***This product does not contain any deliberate addition of asbestos.***

The information provided on this data sheet was abstracted from a supplier MSDS and standard references in occupational health and toxicology. Federal-Mogul makes no representation or warranty with respect to the information obtained from such references. The information provided is, however, as of the date below, true and accurate to the best of Federal-Mogul's knowledge.