

# SAFETY DATA SHEET

## Product: Safe Heet Thermoconductive Adhesive Part "A"

Revision Date: 6/01/2015

### 1. MATERIAL IDENTIFICATION

**Product Name:** Safe Heet Thermoconductive Adhesive Part "A"

**Product Description:** Amine Mixture, Aluminum Colored, Amine Odor

**Product Use:** High Performance Thermally Conductive Adhesive Hardener

**Manufacturer:** McFarlane Aviation, Inc.  
696 E. 1700 Road  
Baldwin City, KS 66006

**Telephone:** 785-594-2741

**Emergency Phone:** 785-594-2741

### 2. HAZARDS IDENTIFICATION

**GHS Classification:**

Skin, Acute Category 4

Skin Corrosion Category 1A

Skin Sensitization Category 1

Eye Damage/Irritation Category 1

Aquatic, Acute Category 1

Aquatic, Chronic Category 1

**GHS Label Elements:**



**GHS Signal Word:**

Warning

**GHS Hazard Determining Component:**

Polyamide Resin

Stabilized Aluminum

**GHS Hazard Statements for Health Hazards:**

H312 Harmful in contact with skin.

H314 Causes severe skin burns and eye damage.

H317 May cause an allergic skin reaction.

H318 Causes serious eye damage.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

**GHS Precautionary Statements - Prevention:**

P260 Do not breathe vapors.

P264 Wash hands thoroughly after handling.

P272 Contaminated work clothing should not be allowed out of the workplace.

P273 Avoid release to the environment.

P280 Wear protective gloves and eye/face protection.

**GHS Precautionary Statements - Response:**

P301+P330+P331 IF SWALLOWED: Rinse mouth. Do not induce vomiting.

P310 Immediately call a poison center or doctor.

P303+P361+P353 IF ON SKIN: Remove immediately all contaminated clothing. Rinse skin with water.

P363 Wash contaminated clothing before reuse.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

P391 Collect spillage.

**GHS Storage/Disposal:**

P405 Store locked up.

P501 Dispose in accordance with local, regional, national or international regulations.

**3. COMPOSITION**

Chemical Name	CAS No.	EC No.	Concentration	GHS Product Identifier
Polyamide Resin	66410-23-1	614-462-7	60.0-80.0%	H312 Skin Acute, Cat 4 H314 Skin Corrosion, Cat 1A H317 Skin Sensitization, Cat 1 H318 Eye Damage/Irritation, Cat 1 H400 Aquatic Acute, Cat 1 H410 Aquatic Chronic, Cat 1
Aluminum Powder, Stabilized	7429-90-5	231-072-3	20.0-40.0%	H226 Flammable Solids, Cat 1

**Note**

This product is a paste mixture and all powders are encapsulated.

**4. FIRST AID MEASURES****Eye Exposure:**

Hold eyelids open and flush with a steady, gentle stream of water for at least 15 minutes. Seek immediate medical attention, preferably with an ophthalmologist. If a physician is not immediately available, eye irrigation should be continued for an additional 15 minutes.

**Skin Exposure:**

Immediately wipe excess material off skin with a dry cloth then wash with plenty of soap and water for at least 5 minutes. See medical attention if irritation develops or persists. Remove contaminated clothing and shoes and clean thoroughly before re-use.

**Inhalation:**

Remove from immediate source of exposure and assure that victim is breathing. If not breathing, administer cardio-pulmonary resuscitation (CPR). If breathing is difficult, administer oxygen if available. Seek medical attention. Symptoms can be delayed several hours.

**Ingestion:**

If swallowed, do not induce vomiting. If victim is conscious and alert, give 1-2 glasses of milk or water to drink. Do not give anything by mouth to an unconscious person. Seek medical attention immediately. Do not leave victim unattended. To prevent aspiration of swallowed product, lay victim on side with head lower than waist. Vomiting may occur spontaneously. If vomiting occurs and the victim is conscious, give additional milk or water to further dilute the chemical.

**Medical Conditions Possibly Aggravated by Exposure:**

Inhalation of product may aggravate existing chronic respiratory problems such as asthma, emphysema or bronchitis. Skin contact may aggravate existing skin disease.

**5. FIRE FIGHTING MEASURES**

**Flash Point:** > 356 °F (closed cup)

**Flammable Limits:** Not available.

**Auto-Ignition Temperature:** Not available.

**Extinguishing Media:** Use carbon dioxide, dry chemical, or appropriate foam.

**Special Fire Fighting Procedures:** Firefighters should wear NIOSH/MSHA approved positive pressure breathing apparatus with full face-piece and full chemical resistant protective clothing. Dike area to prevent runoff and contamination of water sources. Dispose of fire control water later. Extreme heat or water contamination may cause closed containers to explode.

**6. ACCIDENTAL RELEASE MEASURES**

**Personal Protection:** Wear chemical goggles, body-covering protective clothing, chemical resistant gloves, and rubber boots. Use NIOSH approved respirator where mist occurs.

**Spill Cleanup:** Mop up liquid and dispose in accordance with federal, state and local regulations or permits. Flush area with solvent then water to complete cleanup.

**7. HANDLING AND STORAGE**

**Handling:** Avoid contact with eyes, skin and clothing. Avoid breathing vapors. Keep container closed. Promptly clean residue from closures with cloth and solvent. Promptly clean up spills.

**Storage:** Store at room temperature in a dry, well ventilated area, away from combustible material, and away from ignition sources. Keep containers closed. Store in clean plastic or steel containers.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Chemical Name	CAS No.	EC No.	TLV (mg/m <sup>3</sup> )	PEL (mg/m <sup>3</sup> )
Polyamide Resin	68410-23-1	614-452-7	N/E	N/E
Aluminum Powder, Stabilized	7429-90-5	231-072-3	5	5

**Engineering Controls:** Normal ventilation for good working conditions should be used. Keep containers closed. Safety shower and eyewash fountain should be within direct access.

**Respiratory Protection:** This product is not considered respirable in either the liquid or cured forms. However, if the cured product is polished, ground or chipped during processing, handling or use, powders may be released as airborne respirable particles. In these instances, appropriate personal protection equipment and local ventilation controls must be employed. If exposure limits are exceeded and local ventilation is unavailable, a supplied-air respirator or a self-contained NIOSH-approved vapor respirator is required.

**Skin Protection:** Wear body-covering protective clothing and gloves.

**Eye Protection:** Wear chemical goggles or face shield.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Form:** Paste

**Color:** Aluminum

**Odor:** Amine Odor

**Odor Threshold:** Not Determined

**pH:** Not Determined

**Melting Point Range:** Not Determined

**Boiling Point Range:** Not Determined

**Flash Point:** > 356 °F (closed cup)

**Flammability (solid, gaseous):** Not Applicable

**Decomposition Temperature:** Not Determined

**Auto Igniting:** Not Determined

**Danger of Explosion:** Product does not present an explosion hazard

**Explosion Limits**

**Lower:** Not Determined

**Upper:** Not Determined

**Vapor Pressure (mm Hg):** < 1 @ 25 °C

**Density:** 0.98 g/cc @ 20 °C

**Relative Density:** Not Determined

**Vapor Density:** Not Determined

**Evaporation Rate:** Not Determined

**Solubility in / Miscibility Water:** Not miscible or difficult to mix

**Partition Coefficient**

**(n-Octanol/Water):** Not Determined

**Viscosity, Dynamic:** Not Determined

**Viscosity, Kinematic:** Not Determined

**Volatile Organic Compounds:** 0.00 g/l

## 10. STABILITY AND REACTIVITY

**Chemical Stability:** This material is stable under normal conditions of use and storage.

**Conditions to Avoid:** Reacts with epoxy and strong oxidizing agents.

**Hazardous Polymerization:** Will not occur.

**Hazardous Decomposition Materials:** Carbon monoxide, carbon dioxide, oxides of nitrogen, and other organic substances.

## 11. TOXICOLOGICAL INFORMATION

**Acute Toxicity:** Oral: LD50 <5000 mg/kg (rat)

Dermal: LD50 1470 mg/kg (rat)

Primary Irritant Effect

Skin: Strong caustic effect on skin and mucous membranes

Eye: Strong caustic effect; strong irritant with danger of severe eye injury

Sensitization: Sensitization possible through skin contact

Additional: Swallowing will lead to a strong caustic effect on mouth and throat and danger of perforation of esophagus and stomach.

**Carcinogenic Effects:** The product does not contain any ingredient designated by IARC, NTP, ACGIH or OSHA as probable or suspected human carcinogens.

## 12. ECOLOGICAL INFORMATION

**Aquatic Toxicity:** No further relevant information available.

**Persistence & Degradability:** No further relevant information available.

**Bioaccumulative Potential:** No further relevant information available.

**Mobility in Soil:** No further relevant information available.

**Ecotoxicity:** Very toxic for fish.

**General Notes:** Water hazard class 3 (self-assessment): extremely hazardous for water.

Do not allow product to reach ground water, water course or sewage system, even in small quantities.

Must not reach bodies of water or drainage ditch undiluted or unneutralized.

Dangerous to drinking water even if extremely small quantities leak into the ground.

Poisonous to fish and plankton.

Very toxic to aquatic organisms.

### **Results of PBT & vPvB Assessment:**

**PBT:** Not applicable.

**VPvB:** Not applicable

**Other Adverse Effects:** No further information available.

## 13. DISPOSAL CONSIDERATIONS

**Disposal:** Keep out of surface waters, sewers, and waterways entering or leading to surface waters. Notify authorities if any exposure to the environment occurs or is likely to occur. Utilize an appropriate disposal facility, in compliance with federal, state and local environmental control regulations.

## 14. TRANSPORTATION INFORMATION

**DOT UN Status:** The material is not a regulated hazardous material for transportation.

## 15. REGULATORY INFORMATION

### **U.S. Federal Regulations**

**CERCLA:** No CERCLA reportable quantity has been established for this material.

**TSCA:** All ingredients of this material are listed on the TSCA inventory.

### **SARA Title III**

**Sections 302, 304, 313:** This product does not contain any substances reportable under these sections.

### **Sections 311, 312:**

#### **Hazard Classes Yes/No**

Fire Hazard No

Reactivity Hazard No

Pressure Hazard No

Immediate Hazard Yes

Delayed Hazard No

### **International Inventory Status**

Canada (DSL) Yes



Europe (EINECS/ELINCS) Yes

Australia (AICS) Yes

Japan (MITI) Yes

South Korea (KECL) Yes

## 16. OTHER INFORMATION

<p><b>NFPA Ratings (scale 0 – 4)</b></p>	<p>Health, 3 Flammability, 1 Reactivity, 0 Personal Protection, H</p>	
<p><b>HMIS Ratings (scale 0 – 4)</b></p>	<p>Health, 3 Flammability, 1 Reactivity, 0 Personal Protection, H</p>	

### Key Legend Information

**ACGIH** American Conference of Governmental Industrial Hygienists

**ARD** International Agency for Research on Cancer

**CAS** Chemical Abstract Service

**CERCLA** Comprehensive Environmental Response, Compensation & Liability Act

**DSL** Domestic Substance List

**EC** European Commission

**HMIS** Hazardous Materials Identification System

**IARC** International Agency for Research on Cancer

**ND** Not Determined

**NE** Not Established

**NFPA** National Fire Protection Association

**NTP** National Toxicology Program

**OSHA** Occupational Safety and Health Administration

**PEL** Permissible Exposure Limit

**RE** Repeat Exposure

**SARA** Superfund Amendments & Reauthorization Act

**SARA Title III** Emergency Planning & Community Right to Know Act

**SARA Section 302** Extremely Hazardous Substances

**SARA Section 304** Emergency Release

**SARA Section 311** MSDS/List of Chemicals & Hazardous Inventory

**SARA Section 312** Emergency & Hazardous Inventory

**SARA Section 313** Toxic Chemicals & Release Reporting

**SE** Single Exposure

**STEL** Short Term Exposure Limit

**STOT** Specific Target Organ Toxicity

**TLV** Threshold Limit Value

**TWA** Time Weighted Average

**Disclaimer:** The information contained herein is based on data taken from sources believed to be both current and reliable at the time of publication. McFarlane Aviation, Inc. makes no warranty, expressed or implied, as to the accuracy of this MSDS and assumes no liability arising from its use by others. Compliance with all applicable Federal, State and Local laws and regulations remains the responsibility of the user.