

SAFETY DATA SHEET

Product: Safe Heet Thermoconductive Adhesive Part "B"

Revision Date: 6/01/2015

1. MATERIAL IDENTIFICATION

Product Name: Safe Heet Thermoconductive Adhesive Part "B"

Product Description: Epoxy Resin Mixture, Aluminum Colored, And Slight Odor

Product Use: High Performance Thermally Conductive Adhesive Resin

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:

Aquatic Chronic Category 2

Skin Irritation Category 2

Eye Irritation Category 2A

Skin Sensitization Category 1

GHS Label Elements:



GHS Signal Word:

Warning

GHS Hazard Determining Component:

Epoxy Resin

Stabilized Aluminum

GHS Hazard Statements for Health Hazards:

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

H411 Toxic to aquatic life with long lasting effects.

GHS Precautionary Statements - Prevention:

P261 Avoid breathing vapors.

P264 Wash hands thoroughly after handling.

P273 Avoid release to the environment.

P280 Wear protective gloves.

GHS Precautionary Statements – Response:

P302+P352 IF ON SKIN: Wash with plenty of soap and water.

P332+P313 If skin irritation occurs, get medical attention.

P362 Take off contaminated clothing and wash before reuse.

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
Epoxy Resin	25068-38-6	500-033-5	60.0-80.0%	H315 Skin Irritation, Cat 2 H317 Skin Sensitization, Cat 1 H319 Eye Irritation, Cat 2A H411 Aquatic Chronic, Cat 2
Aluminum Powder, Stabilized	7429-90-5	231-072-3	20.0-40.0%	H228 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: > 300 °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 ³)	PEL (mg/m ³)
Aluminum Powder, Stabilized	7429-90-5	231-072-3	5	5
Epoxy Resin	25068 38 6	500 033 5	N/E	N/E

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: Slight Ether Odor

Odor Threshold: Not Determined

pH: Not Determined

Melting Point Range: Not Determined

Boiling Point Range: Not Determined

Flash Point: > 300 °F (closed cup)

Flammability (solid, gaseous): Not Applicable

Decomposition Temperature: Not Determined

Auto Igniting: Product is not self-igniting

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: 1.14 g/cc @ 20 °C

Relative Density: Not Determined

Vapor Density: Not Determined

Evaporation Rate: 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: Storage temperatures above 100 °C

Hazardous Polymerization: Will not occur.

Hazardous Decomposition Products: Carbon monoxide, carbon dioxide, aldehydes, and other organic substances.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity: Primary Irritant Effect:

Skin: Irritant to skin and mucous membranes

Eye: Irritating effect

Sensitization: Sensitization possible through skin contact

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: Toxic for fish.

General Notes: Water hazard class 2 (self-assessment): Hazardous for water.

Do not allow product to reach ground water, water course or sewage system.

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

Poisonous to fish and plankton.

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

NFPA Ratings (scale 0 – 4)	Health, 1 Flammability, 1 Reactivity, 0 Personal Protection, H	
HMIS Ratings (scale 0 – 4)	I Health, 1 Flammability, 1 Reactivity, 0 Personal Protection, H	

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
NIOSH National Institute for Occupational Safety & Health
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 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.