

**SAFETY DATA SHEET**

06/13/16' Date Revised

**1. IDENTITY OF THE PRODUCT AND THE COMPANY**

PRODUCT NAME :AMC-832 HF Copper Clad Laminate  
 MANUFACTURER : ADVANCE MATERIALS CORPORATION  
 Nanshan plant :No.498-2, Sec. 2, Nanshan Rd., Luchu Dist., Taoyuan City 338 , Taiwan  
 PHONE NUMBERS : 886-3-3246000  
 CHEMTREC Emergency : 886-3-3247000

**2. HAZARDS IDENTIFICATION :****EMERGENCY INFORMATION:**

This is nonflammable , dust from machining operations may be a cause of eyes or skin irritation .

Smoke and fumes gases from the thermal decomposition of the material may irritate eyes, noses and throat.

Eyes: May cause minor eye irritation

Skin: May cause skin irritation

Inhalation:

None known or expected. Inhalation of dusts or particulates generated during machining operations (drilling , sanding, grinding etc.) may cause irritation of the respiratory tract.

Ingestion: None known of expected (Not an expected route of exposure.)



Hazard label :

**3. COMPOSITION / INFORMATION ON THE INGREDIENTS**

SUBSTANCE OR PREPARATION : PREPARATION

INGREDIENTS :

Generic NAME :C -Staged cured epoxy/glass composite

INGREDIENT NAME :

PRINCIPAL COMPONENTS

(CHEMICAL AND COMMON NAMES)	%	TLV UNITS	CAS#
Cured Epoxy Resin(non bromine) Halogen content : <1500ppm .	35~85	Not established	N/A
Glass Fabric	15~65	See Note 1.	65997-17-3
Copper Foil (Note 2)	Varies	Not established	7440-50-8

**4. FIRST -AID MEASURE**

Eyes: In case of contact, Immediately flush with plenty of low-pressure water for at least 20 minutes. Remove any contact lenses to ensure thorough flushing. Call a physician.

Skin: Promptly wash with soap and water. Remove contaminated clothing and wash

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thoroughly before reuse. If irritation persists, call a physician.

**5. FIRE –FIGHTING MEASURE**

EXTINGUISHING MEDIA: Water spray, dry chemical, foam, carbon dioxide.

SPECIAL FIREFIGHTING PROCEDURES:

Do not enter confined fire area without a NIOSH approved self-contained breathing apparatus.

**UNUSUAL FIRE AND EXPLOSION HAZARDS:**

Handle as a combustible material. Avoid inhalation of combustion by-products.

**6. ACCIDENTAL RELEASE MEASURES :**

IN CASE OF SPILL OR OTHER RELEASE

Material is considered an irritant. Spill or release to environment is highly unlikely.

**7. HANDLING AND STORAGE PRECAUTIONS:**

HANDLING :

Handle the material with gloves to protect cut a skin .

STORAGE:

Avoid hot, humidity and water condition.

**8.EXPOSURE CONTROL / PERSONAL PROTECTION**

ENGINEERING CONTROLS

Adequate ventilation should be provided to keep dust concentrations below acceptable exposure limits. Discharge from the ventilation system should comply with applicable air pollution control regulations.

PERSONAL PROTECTIVE EQUIPMENT:

Skin AND HANDLE: IMPERVIOUS GLOVES.

EYES: Safety glasses.

Appropriate respiratory protection selected and used in accordance with OSHA Subpart I (29 CFR 1910.134 ) and manufacturer recommendations required If cured product is machined or abraded, releasing dust or fibers, and airborne

Eyewash fountains and safety showers should be easily accessible.

RESPIRATORY :

Atmospheric levels of fibrous glass , copper, and other dusts should be maintained low.

**9. PHYSICAL AND CHEMICAL CHARACTERISTICS**

Boiling point: N/A

Vapor pressure at 20°C :N/A

Vapor density :N/A

Volatile(VOL)%: < 0.10 %

Softening point : N/A

Solubility in water: Insoluble

Specific gravity:1.3—2.1

PH:N/A

Evaporation rate :N/A

Reactivity in water :Non-reactive

APPEARANCE AND ODOR:NO odor, or natural-colored glass reinforced resin sheet , which may be covered with copper cladding on one or both sides.

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### 10. PHYSICAL HAZARDS (STABILITY AND REACTIVITY)

FLASH POINT:N/A

AUTOIGNITION TEMP:N/A

EXTINGUISHING MEDIA: Water spray, dry chemical, foam, carbon dioxide.

SPECIAL FIREFIGHTING PROCEDURES: Do not enter confined fire area without a

NIOSH approved self-contained breathing apparatus.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Handle as a combustible material. Avoid inhalation of combustion by-products.

STABILITY CONSIDERATIONS: None.

INCOMPATIBILITY WITH: None.

HAZARDOUS DECOMPOSITION PRODUCTS: Not Determined.

HAZARDOUS PRODUCTS OF COMBUSTION:

Combustion products depend on temperature, other material present and air supply, As with many organic materials, Irritation gases, carbon monoxide, carbon dioxide, and aromatic hydrocarbons may be formed, Carbon monoxide is expected to be the most prominent.

### 11. TOXIC INFORMATION:

Acute toxicity not relevant

Immediate effects dust may cause eyes ,skin and respiratory irritation .

The components of this product are NOT listed as carcinogens by the National Toxicology Program (NTF). They are not regulated as carcinogens by the Occupational Safety and Health Administration (OSHA). With the exception of fibrous glass, none have been evaluated by the international Agency for Research on Cancer (IARC),

IARC has categorized continuous filament FIBROUS GLASS (the type of fibrous glass used in textile applications such as manufacturing glass fabric for prepreg and laminate manufacture) as not classifiable with respect to human carcinogenicity (Group 3), This classification was based on the fact that the evidence from human, as well as animal , studies wool (primarily used for Insufficient in a variety of application) was classified as a possible human carcinogen by IARC (Group 2B). This classification was primarily based on studies in which experimental animals were exposed to wool glass fibers through non-natural routes. such as injection or implantation.

OTHER DATA:

This thermal degradation products may cause both acute and chronic effects.

### 12. ECOLOGICAL INFORMATION:

Not biodegradable.

(Ecotoxicity, Persistence and degradability Bioaccumulation Soil of liquidity and other adverse effects .)

### 13. DISPOSAL CONSIDERATIONS:

Disposal must be made in accordance with all applicable Local regulations , Copper should be recycled.

### 14. TRANSPORT INFORMATION:

ADVANCE MATERIALS CORP.

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US DOT HAZARD CLASS Not Required.

US DOT ID NUMBER Not Required.

### 15. REQUESTS INFORMATION:

TSCA STATUS : N

OTHER REGULATORY INFORMATION AVAILABLE

CERCLA Section 103 (40CFR302.4) : Y

SARA Section 302 (40CFR355.30) : N

SARA Section 304 (40CFR355.40) : N

SARA Section 313 (40CFR370.65) : Y

OSHA Process Safety (29CFR1910.119) : N

SARA HAZARD CATEGORIES , SARA Section 311/312 (40 CFR 370.21)

ACUTE HAZARD : Y

### 16. OTHER INFORMATION :

Requests for additional on specific should be directed to:  
COPPER CLAD LAMINATES DEPARTMENT

This Material Safety Data Sheet is written following ISO 11014-1.

The product information contained herein is believed to be accurate as of the date of the MSDS , It is the User's obligation to the evaluate and this product safely and to comply with all applicable laws and regulation.