



# CAC

## GHS SAFETY DATA SHEET

Copper Aluminum Copper for Printed Circuit Lamination

**CAC, AC, CA**

FILE NO.: 001

MSDS DATE: 1/1/2021

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### SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

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**PRODUCT NAME:** CAC, AC, CA  
**SYNONYMS:** Copper Aluminum Copper for Printed Circuit Lamination  
**PRODUCT CODES:** N/A

**MANUFACTURER:** CAC  
**ADDRESS:** 20322 Windrow Dr, Lake Forest Ca. 92630 (949) 587-3245

**EMERGENCY PHONE:** (949) 587-3245  
**CHEMTREC PHONE:** (800) 424-9300  
**OTHER CALLS:** N/A  
**FAX PHONE:** N/A

**CHEMICAL NAME:**  
**CHEMICAL FORMULA:** Trade Secret

**PRODUCT USE:** Regular use for the manufacture of printed circuit board panels  
**PREPARED BY:** Brian Herrera

**SECTION 1 NOTES:**  
Considered an "ARTICLE".

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### SECTION 2: HAZARDS IDENTIFICATION

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#### EMERGENCY OVERVIEW:



#### WARNING

**ROUTES OF ENTRY:** N/A

#### POTENTIAL HEALTH EFFECTS

**EYES:** Not a route of exposure under normal usage.

**SKIN:** Not a route of exposure under normal usage. Edges may be sharp, the use of appropriate safety gloves is recommended.

**INGESTION:** Not a route of exposure under normal usage.

**INHALATION:** Not a route of exposure under normal usage.



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SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

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### INGREDIENT:

Aluminum  
Adhesive for CAC  
Copper

<u>CAS NO.</u>	<u>% WT</u>	<u>% VOL</u>	<u>SARA 313 REPORTABLE</u>
7429-90-5	<86		
7440-50-8	<46		
	<u>ppm</u>	<u>mg/m3</u>	
Aluminum: OSHA PEL-TWA:		15mg/m3	
Aluminum: ACGIH TWA:		10mg/m3	

### SECTION 3 NOTES:

The actual organic content of the CAC package is:

Polypropyleneglycol glycidyl ether	<0.0765%	CAS# 9072-62-2
Bisphenol A diglycidyl	<0.045%	CAS# 25068-38-6
Modified bisphenol A epoxy resin	<.0135%	Mixture

PEL: Vacated Permissible Exposure Limits are enforced as the OSHA PEL in some states. Check with your local regulatory agency.

Source of Exposure Limit Data:

ACGIH: American Conference of Governmental Industrial Hygienists

CMRG: Chemical Manufacturer Recommended Guideline

OSHA: Occupational Safety and Health Administration

AIHAL American Industrial Hygiene Association Workplace Environmental Exposure Level (WEEL)

### SECTION 4: FIRST AID MEASURES



**EYES:** Not required under normal usage.

**SKIN:** Wear appropriate gloves to avoid skin injury/ cuts.

**INGESTION:** N/A

**INHALATION:** N/A

**NOTES TO PHYSICIANS OR FIRST AID PROVIDERS:**



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SECTION 4 NOTES:

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### SECTION 5: FIRE-FIGHTING MEASURES

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FLAMMABLE LIMITS IN AIR, UPPER: N/A  
(% BY VOLUME) LOWER: N/A

FLASH POINT:

F:

C: 1084 C

METHOD USED: Estimated

AUTOIGNITION TEMPERATURE: N/A

F: N/A

C: N/A

NFPA HAZARD CLASSIFICATION

HEALTH: N/A

FLAMMABILITY: N/A

REACTIVITY: N/A

OTHER: N/A

HMIS HAZARD CLASSIFICATION

HEALTH: 0

FLAMMABILITY: 0

REACTIVITY: 0

PROTECTION: 0

EXTINGUISHING MEDIA: Use Class D extinguisher on dust, fines or molten metal.

SPECIAL FIRE FIGHTING PROCEDURES: N/A

UNUSUAL FIRE AND EXPLOSION HAZARDS: N/A

HAZARDOUS DECOMPOSITION PRODUCTS:

SECTION 5 NOTES:

Material is a metal and non-combustible.

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### SECTION 6: ACCIDENTAL RELEASE MEASURES

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ACCIDENTAL RELEASE MEASURES: Collect scrap for recycling.

SECTION 6 NOTES:

STORE IN COOL, DRY PLACE, AWAY FROM OPEN FLAMES, SPARKS OR HOT SURFACES.



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SECTION 7: HANDLING AND STORAGE

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### HANDLING AND STORAGE

Store at or below room temperature. Do not freeze.

OTHER PRECAUTIONS:

SECTION 7 NOTES:

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### SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

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ENGINEERING CONTROLS: N/A

VENTILATION: N/A

RESPIRATORY PROTECTION: N/A

EYE PROTECTION: N/A



**SKIN PROTECTION:** To avoid cuts.

**OTHER PROTECTIVE CLOTHING OR EQUIPMENT:** Work with this product in a well-ventilated environment.

WORK HYGIENIC PRACTICES: N/A

EXPOSURE GUIDELINES:

SECTION 8 NOTES:

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### SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

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**APPEARANCE:** Solid: Aluminum sheet.

**ODOR:** Odorless.

**PHYSICAL STATE:** Solid panle board.

**pH AS SUPPLIED:** N/A

**pH (Other):** N/A

**BOILING POINT:** N/A

F: N/A

C: N/A

**MELTING POINT:**

F: 900-1200

C: 480-650

**FREEZING POINT:**

F: N/A

C: N/A

**VAPOR PRESSURE (mmHg):**

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F: N/A

C: N/A



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VAPOR DENSITY (AIR = 1):

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F: N/A

C: N/A

SPECIFIC GRAVITY (H<sub>2</sub>O = 1):

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F: N/A

C: N/A

EVAPORATION RATE: N/A

BASIS (=1): N/A

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### SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES (con't)

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SOLUBILITY IN WATER: N/A

PERCENT SOLIDS BY WEIGHT: 100%

PERCENT VOLATILE: N/A

BY WT/ BY VOL @

F:

C:

VOLATILE ORGANIC COMPOUNDS (VOC): N/A

WITH WATER:	LBS/GAL
WITHOUT WATER:	LBS/GAL

MOLECULAR WEIGHT: N/A

VISCOSITY: N/A

@

F:

C:

SECTION 9 NOTES:

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### SECTION 10: STABILITY AND REACTIVITY

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STABLE

UNSTABLE

STABILITY: YES

CONDITIONS TO AVOID (STABILITY): N/A  
INCOMPATIBILITY (MATERIAL TO AVOID): Water

HAZARDOUS DECOMPOSITION OR BY-PRODUCTS: N/A  
HAZARDOUS POLYMERIZATION: N/A

CONDITIONS TO AVOID (POLYMERIZATION): N/A

SECTION 10 NOTES:



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### SECTION 11: TOXICOLOGICAL INFORMATION

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TOXICOLOGICAL INFORMATION: Toxic fumes may occur if caught on fire.

SECTION 11 NOTES:

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### SECTION 12: ECOLOGICAL INFORMATION

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ECOLOGICAL INFORMATION: N/A

SECTION 12 NOTES:

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### SECTION 13: DISPOSAL CONSIDERATIONS

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WASTE DISPOSAL METHOD: This product is an article and there is no risk of a spill. This product is not considered as a dangerous/ hazardous waste product. Dispose in accordance with local, state and federal regulations.

RCRA HAZARD CLASS: N/A

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### SECTION 13: DISPOSAL CONSIDERATIONS (con't)

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SECTION 13 NOTES:

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### SECTION 14: TRANSPORT INFORMATION

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U.S. DEPARTMENT OF TRANSPORTATION **EXEMPT STATUS**

ID NUMBER:

PROPER SHIPPING NAME:

HAZARD CLASS:

PACKING GROUP:

LABEL STATEMENT:

WATER TRANSPORTATION

ID NUMBER:

PROPER SHIPPING NAME:

HAZARD CLASS:

PACKING GROUP:

LABEL STATEMENTS:

AIR TRANSPORTATION

ID NUMBER:

PROPER SHIPPING NAME:

HAZARD CLASS:

PACKING GROUP:

LABEL STATEMENTS:



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OTHER AGENCIES:

SECTION 14 NOTES:

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**SECTION 15: REGULATORY INFORMATION**

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U.S. FEDERAL REGULATIONS **EXEMPT STATUS**

TSCA (TOXIC SUBSTANCE CONTROL ACT):

CERCLA (COMPREHENSIVE RESPONSE COMPENSATION, AND LIABILITY ACT):

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT):

311/312 HAZARD CATEGORIES:

313 REPORTABLE INGREDIENTS:

STATE REGULATIONS:

INTERNATIONAL REGULATIONS:

SECTION 15 NOTES:

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**SECTION 16: OTHER INFORMATION**

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OTHER INFORMATION: Updated date: 1/1/2021 REVISED

PREPARATION INFORMATION: Safety Department (949) 268-8160

DISCLAIMER: GHS/ SDS Compliant