



LTS Research Laboratories, Inc.  
Safety Data Sheet  
Aluminum Silicon Copper Alloy

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1. Product and Company Identification

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Trade Name: Aluminum Silicon Copper Alloy  
Chemical Formula: AlSiCu  
Recommended Use: Scientific research and development

Manufacturer/Supplier: LTS Research Laboratories, Inc.  
Street: 37 Ramland Road  
City: Orangeburg  
State: New York  
Zip Code: 10962  
Country: USA  
Tel #: 855-587-2436 / 855-lts-chem

24-Hour Emergency Contact: 800-424-9300 (US & Canada)  
+1-703-527-3887 (International)

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2. Hazards Identification

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Signal Word:

Danger



Hazard Statements:

H228: Flammable solid  
H319: Causes serious eye irritation  
H335: May cause respiratory irritation

Precautionary Statements:

P210: Keep away from heat/sparks/open flames/hot surfaces – No smoking  
P240: Ground/bond container and receiving equipment  
P241: Use explosion-proof electrical/ventilating/light/equipment  
P261: Avoid breathing dust/fume/vapor  
P280: Wear protective gloves/protective clothing/eye protection/face protection  
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing.  
P335+P334: Brush off loose particles from skin. Immerse in cool water/wrap in wet bandages  
P370+P378: In case of fire: Use fire-fighting equipment on basis class D for extinction  
P402+P404: Store in a dry place. Store in a closed container  
P403+P233: Store in a well-ventilated place. Keep container tightly closed  
P405: Store locked up  
P501: Dispose of contents/container in accordance with local/regional/national/international regulations

HMIS Health Ratings (0-4):

Health: 1  
Flammability: 3  
Physical: 2

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### 3. Composition

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Chemical Family:	Alloy
Additional Names:	N/A
Aluminum (Al):	
Percentage:	0-100 wt%
CAS #:	7429-90-5
EC #:	231-072-3
Silicon (Si):	
Percentage:	0-100 wt%
CAS #:	7440-21-3
EC #:	231-130-8
Copper (Cu):	
Percentage:	0-100 wt%
CAS #:	7440-50-8
EC #:	231-159-6

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### 4. First Aid Procedures

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General Treatment:	Seek medical attention if symptoms persist.
Special Treatment:	None
Important Symptoms:	None
Inhalation:	Remove victim to fresh air. Supply oxygen if breathing is difficult. Seek medical attention.
Ingestion:	Seek medical attention.
Skin:	Wash affected area with mild soap and water. Seek immediate medical Attention.
Eyes:	Flush eyes with water, blinking often for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. Seek immediate medical attention.

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### 5. Firefighting Measures

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Flammability:	Flammable as powder
Extinguishing Media:	Do not use water for metal fires – use CO <sub>2</sub> , sand, extinguishing powder.
Spec. Fire Fighting Procedure:	Use full-face, self-contained breathing apparatus with full protective clothing to prevent contact with skin and eyes. See section 10 for decomposition products.

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### 6. Accidental Release Measures

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If Material Is Released/Spilled:	Wear appropriate respiratory and protective equipment specified in special protection information. Isolate spill area and provide ventilation. Vacuum up spill using a high efficiency particulate absolute (HEPA) air filter and place in a closed container for disposal. Take care not to raise dust.
Environmental Precautions:	Isolate runoff to prevent environmental pollution.

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## 7. Handling and Storage

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Handling Conditions:	Handle under inert gas. Protect from moisture. Wash thoroughly after Handling.
Storage Conditions:	Store in a cool dry place in a tightly sealed container. Store apart from materials and conditions listed in section 10.
Work/Hygienic Maintenance:	Do not use tobacco or food in work area. Wash thoroughly before eating and smoking. Do not blow dust off clothing or skin with compressed air.
Ventilation:	Provide sufficient ventilation to maintain concentration at or below threshold limit.

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## 8. Exposure Controls and Personal Protection

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Permissible Exposure Limits:	15 mg/m <sup>3</sup> as Al, long-term value 15 mg/m <sup>3</sup> as Si, total dust, long-term value 5 mg/m <sup>3</sup> as Si, respirable fraction, long-term value 0.1 mg/m <sup>3</sup> as Cu, metal fume, long-term value 1 mg/m <sup>3</sup> as Cu, metal dusts and mists, long-term value
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Threshold Limit Value:	1 mg/m <sup>3</sup> as Al, long-term value 0.2 mg/m <sup>3</sup> as Cu, metal fume, long-term value 1 mg/m <sup>3</sup> as Cu, metal dusts and mists, long-term value
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Special Equipment:	None
Respiratory Protection:	Dust Respirator
Protective Gloves:	Rubber gloves
Eye Protection:	Safety glasses or goggles
Body Protection:	Protective work clothing. Wear close-toed shoes and long sleeves/pants.

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## 9. Physical and Chemical Characteristics

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Color	N/A
Form:	Powder, Granules, Pellets, Sputtering target, Custom parts
Odor:	Odorless
Water Solubility:	Insoluble
Boiling Point:	N/A
Melting Point:	N/A
Flash Point:	N/A
Autoignition Temperature:	N/A
Density:	N/A
Molecular weight:	N/A

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## 10. Reactivity

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Stability:	Stable under recommended storage conditions
Reacts With:	Water, Strong acids, Strong bases, Alcohols, Halogens, Oxidizing agents
Incompatible Conditions:	Moisture sensitive
Hazardous Decomposition Products:	Metal oxide fume, Aluminum oxide fumes, Silicon dioxide fumes, Copper oxide fumes

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## 11. Toxicological Information

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### Potential Health Effects:

Eyes:	May cause irritation
Skin:	May cause irritation
Ingestion:	May cause irritation
Inhalation:	May cause irritation
Chronic:	N/A

Signs & Symptoms:	N/A
Aggravated Medical Conditions:	N/A

Median Lethal Dose: N/A

Carcinogen: N/A

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## 12. Ecological Information

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Aquatic Toxicity:	Medium
Persistent Bioaccumulation Toxicity:	No
Very Persistent, Very Bioaccumulative:	No
Notes:	May cause long lasting harmful effect on aquatic life. Do not allow material to be released to the environment without proper governmental permits

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## 13. Disposal Considerations

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Dispose of in accordance with local, state, national, and international regulations.

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## 14. Transportation Data

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Hazardous: Hazardous as powder only



Hazard Class:	4.1 Flammable solids, self-reactive substances and solid desensitized explosives
Packing Group:	III
UN Number:	3089
Proper Shipping Name:	Metal powders, flammable, n.o.s. (Aluminum Silicon Copper Alloy)

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## 15. Regulatory Information

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Sec 302 Extremely Hazardous:	No
Sec 304 Reportable Quantities:	N/A
Sec 313 Toxic Chemicals:	Yes

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## 16. Other Information

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This safety data sheet should be used in conjunction with technical sheets. It does not replace them. The information given is based on our knowledge of this product, at the time of publication. It is given in good faith. The attention of the user is drawn to the possible risks incurred by using the product for any other purpose other than that for which it was intended. This does not in any way excuse the user from knowing and applying all the regulations governing his activity. It is the sole responsibility of the user to take all precautions required in handling the product. The aim of the mandatory regulations mentioned is to help the user to fulfill his obligations regarding the use of hazardous products.

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