

# SAFETY DATA SHEET

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## SECTION 1. IDENTIFICATION

**Product Identifier:** Beryllium Copper Lithium Alloy

**Product Code:** BE-CULI-01-SLD

**CAS Number:** N/A

**Relevant identified uses of the substance:** Scientific research and development

Supplier details:

American Elements  
10884 Weyburn Ave.  
Los Angeles, CA 90024  
Tel: +1 310-208-0551  
Fax: +1 310-208-0351  
Emergency telephone number:  
+1 800-424-9300

## SECTION 2. HAZARDS IDENTIFICATION

Classification EC 67/548 or EC 1999/45

: C; R34

Hazard Class and Category Code Regulation EC 1272/2008 (CLP)

- Health hazards

: Skin Irrit. 2 - H315

: Eye Irrit. 2 - H319

Label elements

- Hazard pictograms



Hazard pictograms code : GHS07

- Signal words : Warning

- Hazard statements : Causes skin irritation.

: Causes serious eye irritation

Precautionary statements

- General : N.B.: In the CLP Regulation,

1.3.4.1. Metals in massive form, alloys, mixtures containing polymers and mixtures containing elastomers do not require a label according to this Annex (see CLP), if they do not present a hazard to human health by inhalation, ingestion or contact with skin or to the aquatic environment in the form in

which they are placed on the market, although classified as hazardous in accordance with the criteria of this Annex (see CLP).

1.3.4.2. Instead, the supplier shall provide the information to downstream users or distributors by means of the SDS.

- Prevention : P261 Avoid breathing dust/fume.

P262 Do not get in eyes, on skin, or on clothing

P280 Wear protective gloves/eye protection

P284 Wear respiratory protection in case of trouble.

- Response : See sections 4 and 5.

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## SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substances

CAS No. / Substance Name:

7440-41-7 Beryllium

Identification number(s):

EC number:

231-150-7

Index number:

004-001-00-7

7440-50-8 Copper

Identification number(s):

EC number:

231-159-6

7439-93-2 Lithium

Identification number(s):

EC number:

231-102-5

Index number:

003-001-00-4

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## SECTION 4. FIRST AID MEASURES

- Inhalation : In case of dust generation during some work operations and inhalation remove to ventilated area and keep calm. In case of ongoing discomfort consult a physician

- Skin contact : In case of burns from hot/liquid metal, rinse with plenty of water and contact physician. In case of liquid metal splashes, remove affected clothing. In case of persisting irritation consult a physician.

- Eye contact : If particles comes into contact with eyes rinse with plenty of water and contact physician. Treatment may be required.

Ingestion : N/A here

Inhalation : May cause respiratory irritation

- Skin contact : May cause skin irritation

- Eye contact : May cause eye irritation

- Ingestion : N/A here

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## SECTION 5. FIREFIGHTING MEASURES

This product does not present fire or explosion hazards as shipped. Small chips, dust and fines may be ignitable.

Avoid sparks and prevent electrostatic charges from accumulating.

Inflammation of dusts could happen at temperature > 250°C

- Suitable extinguishing media : Use class D extinguishing agents on dust, fines or molten metal

- Unsuitable extinguishing media : Water, foam, halogenated extinguishing agents. Do not use water.

Special hazards arising from the substance or mixture

Specific hazards : None known.

Reaction with water : Fine particles in contact with water may generate flammable gases, dust explosions may also occur.

Advice for firefighters

Special protective equipment for fire fighters : Fire fighters should wear approved, positive pressure, self- contained breathing apparatus and full heat protective clothing when appropriate

Specific methods : The product as such is not flammable. Use firefighting extinguishing methods suitable to surrounding conditions

Fine dispersed (dust, powder) may form explosive mixtures in contact with air. In case of fine particles in contact with water, flammable gases in hazardous quantities may be released.

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## SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

See protection measures listed in section 8.

Environmental precautions

Collect scrap for recycling

Methods and material for containment and cleaning up

Clean-up methods : Pick up mechanically. In liquid form let solidify and cool down to ambient air temperature.

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## SECTION 7. HANDLING AND STORAGE

Handling

Precautions for safe handling

Keep container tightly sealed.

Store in cool, dry place in tightly closed containers.

Information about protection against explosions and fires:

No special measures required.

Conditions for safe storage, including any incompatibilities

Requirements to be met by storerooms and receptacles:

No special requirements.

Information about storage in one common storage facility:

No data available

Further information about storage conditions:

Keep container tightly sealed.

Store in cool, dry conditions in well-sealed containers.

Specific end use(s)

No data available

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## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Appropriate engineering controls

Adequate ventilation should be used to convey finely divided metallic dust generated by grinding, sawing or polishing operations, in order to eliminate explosion hazards.

Individual protection measures, such as personal protective equipment

Personal protection : Use appropriate PPE when handling ingots and hot metal (CEN standards) and flame retardant and molten metal splash resistant clothing when handling liquid metal.

- Respiratory protection : Respiratory equipment: not required under recommended conditions of use. In case dust or fumes are released personal protective equipment required to prevent any irritation or if exposure limits are exceeded.

- Hand protection : Wear suitable gloves to prevent skin irritation.

- Eye protection : Wear suitable protective equipment to prevent eye irritation

- Ingestion : Ingestion unlikely.

Environmental exposure controls

No special exposure controls necessary.

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## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Physical state : Target

Colour : Silvery or silvery grey

Odor

None.

pH value : N/A on massive form.

Melting point / Freezing point

Not available

Initial boiling point - boiling range

Not available

Flash point

N/A on massive form.

Flammability

N/A on massive form.

Relative density

Not available

Explosive Properties

N/A on massive form.

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## SECTION 10. STABILITY AND REACTIVITY

Reactivity

Stability and reactivity : Stable under normal conditions of storage, handling and use.

Chemical stability

Stability : Stable under normal conditions of storage, handling and use.

Possibility of hazardous reactions

Hazardous reactions : Massive metal is stable and none reactive under normal conditions of use, storage and transport.

May react violently in contact with certain metal oxides and nitrates (rust etc.).

Conditions to avoid

Avoid melting wet or cold materials as molten metal may cause explosions in contact with water or wet surfaces.

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## SECTION 11. TOXICOLOGICAL INFORMATION

Information on toxicological effects

Acute toxicity:

Swallowing will lead to a strong corrosive effect on mouth and throat and to the danger of perforation of esophagus and stomach.

The Registry of Toxic Effects of Chemical Substances (RTECS) contains acute toxicity data for this substance.

LD/LC50 values that are relevant for classification:

No data

Skin irritation or corrosion:

Causes severe skin burns.

Eye irritation or corrosion:

Causes serious eye damage.

Sensitization:

No sensitizing effects known.

Germ cell mutagenicity:

The Registry of Toxic Effects of Chemical Substances (RTECS) contains mutation data for this substance.

Carcinogenicity:

No classification data on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH.

Reproductive toxicity:

The Registry of Toxic Effects of Chemical Substances (RTECS) contains reproductive data for this substance.

Specific target organ system toxicity - repeated exposure:

No effects known.

Specific target organ system toxicity - single exposure:

No effects known.

Aspiration hazard:

No effects known.

Subacute to chronic toxicity:

The Registry of Toxic Effects of Chemical Substances (RTECS) contains multiple dose toxicity data for this substance.

Additional toxicological information:

To the best of our knowledge the acute and chronic toxicity of this substance is not fully known.

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## SECTION 12. ECOLOGICAL INFORMATION

Toxicity

Aquatic toxicity:

No data available.

Persistence and degradability

No data available.

Bioaccumulative potential

No data available.

Mobility in soil

No data available.

Additional ecological information:

Avoid transfer into the environment.

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## **SECTION 13. DISPOSAL CONSIDERATIONS**

Waste treatment methods

Recommendation

Consult official regulations to ensure proper disposal.

Uncleaned packagings:

Recommendation:

Disposal must be made according to official regulations.

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## **SECTION 14. TRANSPORT INFORMATION**

General information : Not regulated.

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## **SECTION 15. REGULATORY INFORMATION**

Safety, health and environmental regulations/legislation specific for the substance or mixture

No knowledge about classification or special regulations. Follow general rules for handling, transport and waste management.

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## **16. OTHER INFORMATION**

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH). The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. American Elements shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale. COPYRIGHT 1997-2022 AMERICAN ELEMENTS. LICENSED GRANTED TO MAKE UNLIMITED PAPER COPIES FOR INTERNAL USE ONLY.