SAFETY DATA SHEET

SDS Name: **Al-Cop Braze, Flux Cored, Aluminum to Copper**

SolderWeld, Inc.

SECTION I: Indentification of the substance/mixture and the company

1.1 Product Identifier

Product name: **Al-Cop Braze, Flux Cored, Aluminum to Copper**

1.2 Relevant Identified uses of the substance and uses advised against

1.2.1 Relevant identified uses

Main use category	:	Professional Use
Industrial/Professional use spec	:	For Professional use only
Use of substance	:	Brazing, soldering, and welding products, flux products

1.2.2 Uses advised against

No additional information available

1.3 Details of Supplier of the Safety Data Sheet

SolderWeld, Inc.
2050 N 300 W #72
Spanish Fork, UT 84660
USA
800-356-8449
info@solderweld.com

1.4 Emergency Telephone Number

Emergency Number : 001-800-424-9300 (Chemtrec)

SECTION 2: Hazards Identification

2.1 Classification of the substance

Classified according to the criteria of the Globally Harmonized System of Classification and Labeling of Chemicals (GHS), OSHA Hazard Communication Standard (29 CFR 1910.1200) and the Canadian Controlled Products Regulations.

2.2 Label elements

· **Label elements**
· **GHS label elements**
The product is not classified as hazardous according to OSHA GHS regulations within the United States.
· **Hazard pictograms** Not Regulated
· **Signal word** Not Regulated

· **Hazard-determining components of labeling:** None.
· **Hazard statements** Not Regulated
· **Precautionary statements** Not Regulated

2.3 Other Hazards

· **Other hazards which do not result in GHS classification:**
Heat rays (infrared radiation) from flame or hot metal can injure eyes. Overexposure to brazing fumes and gases can be hazardous. Read and understand the manufacturer's instructions, Safety Data Sheets and the precautionary labels before using this product.

SECTION 3: Hazards Identification

3.1 Mixture

· **Dangerous components:**

7440-66-6	zinc metal	70-98%
7429-90-5	aluminum	2-30%
138577-01-2	cesium fluoroaluminate	10-25%

· **Composition comments:**
The term "Hazardous Ingredients" should be interpreted as a term defined in Hazard Communication standards and does not necessarily imply the existence of a hazard. The product may contain additional nonhazardous ingredients or may form additional compounds under the condition of use. Refer to Sections 2 and 8 for more information.

SECTION 4: First aid measures

4.1 Description of first aid measures

· **General information:** No special measures required.
· **After inhalation:**
Move to fresh air if breathing is difficult. If breathing has stopped, perform artificial respiration and obtain medical assistance at once.
· **After skin contact:**
Remove contaminated clothing and wash the skin thoroughly with soap and water. For reddened or blistered skin, or thermal burns, obtain medical assistance at once.
· **After eye contact:**
Dust or fume from this product should be flushed from the eyes with copious amounts of clean, tepid water until transported to an emergency medical facility. Do not allow victim to rub or keep eyes tightly closed. Obtain medical assistance at once.
· **After swallowing:**
Unlikely due to form of product, except for granular materials. Avoid hand, clothing, food, and drink contact with metal fume or powder which can cause ingestion of particulate during hand to mouth activities such as drinking, eating, smoking, etc. If ingested, do not induce vomiting. Contact a poison control center. Unless the poison control center advises otherwise, wash out mouth thoroughly with water. If symptoms develop, seek medical attention at once.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media: As shipped, the product will not burn. In case of fire in the surroundings: use appropriate extinguishing agent. For metal fires: Use specific agents only.

5.2 Special hazards arising from the mixture

Fire hazard:	No Information Provided
Explosion hazard:	No Information Provided
Reactivity in case of fire:	No Information Provided
Hazardous decomposition products in case of fire:	No Information Provided

5.3 Advice for firefighters

·Special fire fighting procedures:
Use standard firefighting procedures and consider the hazards of other involved materials.

·Protective equipment:
Wear self-contained respiratory protective device.
Wear fully protective suit.

·Additional information
Read and understand Am erican National Standard Z49.1, "Safety In W elding, Cutting and Allied Processes" and National Fire rotection Association NFPA 51B, "Standard for Fire Prevention During Welding, Cutting and Other Hot Work" before using this product.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

General measures: Refer to recommendations in Section 8.

6.1.1 For non-emergency personnel

Protective equipment:	Wear suitable protective clothing, gloves and eye or face protection.
Emergency procedures:	Ventilate area. Avoid contact with skin and eyes. Avoid breathing dust/fume.
Measures in case of dust release:	Where excessive dust may result, use approved respiratory protection equip.

6.1.2 For emergency responders

Protective equipment:	Do not attempt to take action without suitable protective equipment. Wear suitable protective clothing, gloves and eye or face protection. For further information refer to section 8: "Exposure controls/personal protection". Avoid contact with skin and eyes. Avoid breathing dust/fume.
Emergency procedures:	Evacuate unnecessary personnel. Ventilate area.

6.2 Environmental precautions

Avoid release to the environment.

6.3 Methods and material for containment and cleaning up

For containment:	No special measures required.
Methods for cleaning up:	Recover mechanically the product. This material and its container must be disposed of in a safe way and as per local legislation.
Other information:	Dispose of in accordance with relevant local regulations. This material and its container must be disposed of as hazardous waste.

6.4 Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection". For disposal of solid materials or residues refer section13: "Disposal considerations".

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Precautions for safe handling:	Ensure good ventilation of the work station. Obtain special instructions before use. Do not handle until safety precautions have been read and understood. Wear personal protective equipment. Avoid contact with skin and eyes. Avoid breathing dust/fume.
Hygiene measures:	Do not eat, drink or smoke when using this product. Always wash hands after handling the product. Wash contaminated clothing before reuse. Contaminated work clothing should not be allowed out of the workplace.

7.2 Conditions for safe storage, including any incompatibilities

Technical measures:	No special requirements.
Storage conditions:	No special requirements.
Incompatible products:	Acetylene, ammonia, ammonium nitrate, aqua regia, dioxane, ethylene oxide, chlorine trifluoride, halogens, hydrogen peroxide, hydrazine, mononitrate, hydrazoic acid, hydroxylamine, hydrogen sulfide, performic acid, phosphorus, selenium, sulfur, titanium plus potassium chlorate, bromates chlorates and iodate of alkali and alkali earth metals.
Storage area:	No special requirements.
Packaging materials:	No special requirements.

7.3 Specific end use

No further relevant information available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Threshold Limit Values (TLVs) and Biological Exposure Indices (BEIs) are values published by the American Conference of Government Industrial Hygienists (ACGIH). ACGIH Statement of Positions Regarding the TLVs® and BEIs® states that the TLV-TW A should be used as a guide in the control of health hazards and should not be used to indicate a fine line between safe and dangerous exposures. See Sections 2, 3, 8, 10, and 11 for information on potential fume constituents of health interest. Threshold Limit Values are figures published by the American Conference of Government Industrial Hygienists.

8.2 Exposure controls

Appropriate engineering controls:	Provide adequate general and local exhaust ventilation
Personal protective equipment	Combined gas/dust mask with filter type P3. Gloves. Safety glasses.
Materials for protective clothing:	Wear suitable protective clothing
Hand protection:	Protective gloves
Eye protection:	Safety glasses.
Skin and body protection:	Wear suitable protective clothing
Respiratory protection:	Combined gas/dust mask with filter type P3




Environmental exposure controls: Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

· **Information on basic physical and chemical properties**
· **General Information**

Appearance:	Solid material
Color:	Silver-colored
Odor:	Odorless
Odor threshold:	Not determined.
pH-value:	Not applicable.
Change in condition Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	Undetermined.
Flash point:	Not applicable.
Flammability (solid, gaseous):	Not determined.
Auto-ignition	Not determined.
temperature:	Not determined.
Decomposition temperature:	Product is not self-igniting.
Auto igniting:	Product does not present an explosion hazard.
Danger of explosion:	Not determined.
Explosion limits:	Not determined.
Lower:	Not applicable.
Upper:	Not determined.
Vapor pressure:	Not determined.
Density:	Not applicable.
Relative density	Not applicable.
Vapour density	Not applicable.
Evaporation rate	Not applicable.
Solubility in / Miscibility with Water:	Insoluble.
Viscosity:	Not determined.
Dynamic:	Not applicable.
Partition coefficient (n-octanol/water):	Not applicable.
Kinematic:	Not applicable.
Other information:	No further relevant information available.

SECTION 10: Stability and reactivity

· **Reactivity** The product is non-reactive under normal conditions of use, storage and transport.
· **Chemical stability** Stable under normal temperatures and pressures.

10.1 Reactivity

No decomposition if used and stored according to specifications.

10.3 Possibility of hazardous reactions

Reacts with strong acids and alkali. Reacts with strong oxidizing agents.

10.4 Conditions to avoid

10.5 Incompatible materials

No further relevant information available.

10.6 Hazardous decomposition products

No decomposition if used and stored according to specifications.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity:	LD/LC50 values that are relevant for classification:
Skin corrosion/irritation:	None.
Serious eye damage/irritation:	No irritant effect.
Respiratory or skin sensitization:	No irritating effect.
Germ cell mutagenicity:	No irritating effect.
Carcinogenicity:	Not known or expected under normal use
Reproductive toxicity:	Not known or expected under normal use
Specific target organ toxicity (single exposure):	Not known or expected under normal use
Specific target organ toxicity (repeated exposure):	Not known or expected under normal use

SECTION 12: Ecology information

12.1 toxicity

Ecology - general: No further relevant information available.

Ecology- Water: No further relevant information available.

12.2 Persistance and degradability

Inorganic product, is not eliminable from water by means of biological cleaning processes.

12.3 Bioaccumulative potential

Bioaccumulative potential:	Not established

12.4 Mobility in soil

Ecology - Soil:	Not established

12.5 Results of PBT and vPvB assessment

·PBT: Not applicable.
·vPvB: Not applicable.

12.6 Other adverse effects

Other adverse effects:	None known
Additional information:	No other effects known

SECTION 13: Disposal consideration

13.1 Waste treatment methods

· **Recommendation:**
The generation of waste should be avoided or minimized whenever possible. When practical, recycle in an environmentally acceptable, regulatory compliant manner. Dispose of non-recyclable products in accordance with all applicable Federal, State, Provincial, and Local requirements.
The user of this material has the responsibility to dispose of unused material, residues and containers in compliance with all relevant local, state and federal laws and regulations regarding treatment, storage and disposal for hazardous and nonhazardous wastes.

· **Uncleaned packagings:**
· **Recommendation:** Disposal must be made according to official regulations.

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

14.1 UN number

UN-No. (ADR)	Not applicable
UN-No. (IMDG)	Not applicable
UN-No. (IATA)	Not applicable
UN-No. (ADN)	Not applicable
UN-No. (RID)	Not applicable

14.2 UN proper shipping name

Proper shipping name (ADR)	Not applicable
Proper shipping name (IMDG)	Not applicable
Proper shipping name. (IATA)	Not applicable
Proper shipping name (ADN)	Not applicable
Proper shipping name (RID)	Not applicable

14.3 Transport hazard class(es)

ADR	
Transport hazard class(es)	Not Applicable
IMDG	
Transport hazard class(es)	Not Applicable
IATA	
Transport hazard class(es)	Not Applicable
ADN	
Transport hazard class(es)	Not Applicable
RID	
Transport hazard class(es)	Not Applicable

14.4 Packing group

Packing group (ADR)	Not applicable
Packing group (IMDG)	Not applicable
Packing group (IATA)	Not applicable
Packing group (ADN)	Not applicable
Packing group (RID)	Not applicable

14.5 Environmental hazards

Dangerous for the environment	No
Marine pollutant	No
Other information	No supplementary information available

SECTION 15: Regulatory information

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

· **US Federal Regulations**
None of the ingredients is listed.

· **US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)**
None present or none present in regulated quantities.

· **Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)**
None present or none present in regulated quantities.

· **Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130):**
None present or none present in regulated quantities.

· **Proposition 65 (California)**

· **Chemicals known to cause cancer:**

None of the ingredients are listed.

SECTION 16: Other information

·**Abbreviations and acronyms:**
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
DOT: US Department of Transportation
IATA: International Air Transport Association
ACGIH: American Conference of Governmental Industrial Hygienists
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
DNEL: Derived No-Effect Level (REACH)
PNEC: Predicted No-Effect Concentration (REACH)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
SVHC: Substances of Very High Concern
vPvB: very Persistent and very Bioaccumulative

*This information must be included in all SDS that are copied and distributed for this material.

Please retain this sheet for your files. SolderWeld, Inc. maintains a file of Safety Data Sheets (SDS) for each rods and fluxes produced in compliance with Federal OSHA Hazard Communication Standard (29 CFR 1910.1200) & various right-to-know laws.

The information and recommendations contained within this publication have been compiled from sources believed to be reliable and to represent the best information available to SolderWeld, Inc. at the time of issue. It is our policy to include an SDS with initial orders for each product. This submission is to become a matter of record and need not accompany subsequent shipments for the same product to the same customer. The information contained on this sheet is intended solely for employee health and safety education and not for contract specification purposes. No warranty, guarantee, or representation is made by SolderWeld, Inc., nor does SolderWeld, Inc. assume any responsibility in connection there within; nor can it be assumed that all acceptable safety measures or other safety measures may not be required under particular or exceptional conditions or circumstances. Should you need additional information, contact us.