



SAFETY DATA SHEET

This Safety Data Sheet complies with Annex II of 830/2015 amending EC No. 1907/2006, CLP directive 1272/2008, also in accordance with ISO 11014-1 and ANSI Z400.1

All-State General Purpose Paste Solder

Issued: 2018-01-14

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Trade name All-State General Purpose Paste Solder

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use Paste Solder

1.3. Details of the supplier of the safety data sheet

SDS created by TDS Team

Supplier ESAB DENTON

Street address 2800 Airport Road
Denton, TX 76207

Telephone 1-800-372-2123

Email sdsrequest@esab.com

Web site www.esab.com

1.4. Emergency telephone number

Emergency phone number 1-800-372-2123

Available outside office hours No

Other

AWS Classification: None

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

The product is not classified

2.2. Label elements

The product do not require labeling

2.3. Other hazards

Emergency Overview: A fine white, blue or red powder with no odor. Harmful if swallowed.

Avoid eye contact or inhalation of dust from the product. Dusts may irritate the eyes and can cause respiratory irritation.

This product is normally not considered hazardous as shipped. Gloves should be worn when handling to prevent contaminating hands with product dust.

Persons with a pacemaker should not go near welding or cutting operations until they have consulted their doctor and obtained information from the manufacturer of the device.

When this product is used in a brazing process, the most important hazards are heat, radiation, electric shock and brazing fumes.

Heat: Spatter and melting metal can cause burn injuries and start fires.

Radiation: Arc rays can severely damage eyes or skin.

Electricity: Electric shock can kill.

Fumes: Overexposure to brazing fumes may result in symptoms like metal fume fever, dizziness, nausea, dryness or irritation of the nose, throat, and eyes. Chronic overexposure to brazing fumes may affect pulmonary function.

Flame Processing: When used with combustible gas equipment (e.g., oxy-acetylene torch), read the use and safety information for that equipment.



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SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical name	CAS No. EC No.	Concentration	Classification	R-phrase H-phrase
Lead	7439-92-1 231-100-4	30 - 45%	- -	- -
Tin	7440-31-5 231-141-8	30 - 45%	- -	- -
Zinc chloride	7646-85-7 231-592-0	10 - 30%	- Aquatic Acute 1, Aquatic Chronic 1, Skin Corr. 1B, Acute Tox. 4 - oral	- H302, H314, H410
Ammonium chloride	12125-02-9 235-186-4	3 - 7%	- Eye Irrit. 2, Acute Tox. 4 - oral	- H302, H319

SECTION 4: First aid measures

4.1. Description of first aid measures

Electric shock: Disconnect and turn off the power. Use a nonconductive material to pull victim away from contact with live parts or wires. If not breathing, begin artificial respiration, preferably mouth-to-mouth. If no detectable pulse, begin CPR Call a physician immediately.

Inhalation	If breathing has stopped, perform artificial respiration and obtain medical assistance immediately! If breathing is difficult, provide fresh air and call physician.
Skin contact	For skin burns from arc radiation, promptly flush with cold water. Get medical attention for burns or irritations that persist. To remove dust or particles wash with mild soap and water.
Eye contact	For radiation burns due to arc flash, see physician. To remove dusts or fumes flush with water for at least fifteen minutes. If irritation persists, obtain medical assistance.
Ingestion	IF SWALLOWED: Call a POISON CENTER or doctor . Rinse mouth. Do NOT induce vomiting.

4.2. Most important symptoms and effects, both acute and delayed

Not applicable

4.3. Indication of any immediate medical attention and special treatment needed

Not applicable

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	The product is not flammable. Use CO2 or dry chemical on surrounding fire. Do not use water on fire where molten metal is present.
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5.2. Special hazards arising from the substance or mixture

In extremely high temperature fires or in contact with certain acids, flux may emit toxic fumes. Paste decomposes to form ammonia, hydrogen chloride gas, and zinc chloride fumes.

5.3. Advice for firefighters

Special protective equipment for fire-fighters	Wear self-contained breathing apparatus as fumes or vapors may be harmful.
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SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Use respirator or air supplied respirator when brazing in a confined space, or where local exhaust or ventilation is not sufficient to keep exposure values within safe limits. Use special care when brazing painted or coated steels since hazardous substances from the coating may be emitted. Wear hand, head, eyes, ear and body protection like welders gloves, helmet or face shield with filter lens, safety boots, apron, arm and shoulder protection. Keep protective clothing clean and dry.

6.2. Environmental precautions

Refer to Section 13.

6.3. Methods and material for containment and cleaning up

Not applicable

6.4. Reference to other sections

Not applicable

Other

Solid objects may be picked up and placed into a container. Liquids or pastes should be scooped up and placed into a container. Wear proper protective equipment while handling these materials. Do not discard as refuse.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Preventive handling precautions

Wear gloves and safety goggles when handling. Wash hands and face thoroughly after handling. Do not swallow or breathe vapors produced by use of product. Wash hands after using. Some individuals can develop an allergic reaction to certain materials.

7.2. Conditions for safe storage, including any incompatibilities

Keep separate from chemical substances like acids and strong bases, which could cause chemical reactions. Store in cool/well-ventilated place.

7.3. Specific end use(s)

Not applicable

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits

Use industrial hygiene monitoring equipment to ensure that exposure does not exceed applicable national exposure limits. The following limits can be used as guidance. Unless noted, all values are for 8 hour time weighted averages (TWA).



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National occupational exposure limits

Ingredient	CAS no. EC No.	Exposure limit mg/m3-ppm		Short-term exposure limit mg/m3-ppm		Remark	Source	Year
Ammonium chloride	12125-02-9 235-186-4	-	-	-	-	No PEL	OSHA	2016
Lead	7439-92-1 231-100-4	0,05	-	-	-	-	OSHA	2016
Tin	7440-31-5 231-141-8	2	-	-	-	as Sn	OSHA	2016
Zinc chloride	7646-85-7 231-592-0	1	-	-	-	-	OSHA	2016

8.2. Exposure controls

Technical precaution measures

Ensure sufficient ventilation, local exhaust, or both. Keep working place and protective clothing clean and dry. Check condition of protective clothing and equipment on a regular basis. Train welders to avoid contact with live electrical parts and insulate conductive parts.

Other

Avoid exposure to brazing and welding fumes, radiation, spatter, electric shock, heated materials and dust.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

a) Appearance	Not applicable
b) Odour	Not applicable
c) Odour treshold	Not applicable
d) pH value	Not applicable
e) Melting point / freezing point	Not applicable
f) Initial boiling point and boiling range	Not applicable
g) Flash point	The product is not flammable.
h) Evaporation rate	Not applicable
i) Flammability (solid, gas)	Not applicable
j) Upper / lower flammability or explosive limits	Not applicable
k) Vapour pressure	Not applicable
l) Vapour density	Not applicable
m) Relative density	Not applicable
n) Solubility	Not applicable
o) Partition coefficient: n-octanol / water	Not applicable
p) Auto-ignition temperature	Not applicable



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q) Decomposition temperature	Not applicable
r) Viscosity	Not applicable
s) Explosive properties	Not applicable
t) Oxidising properties	Not applicable
Appearance	Pasty solid. Silver-white metallic paste.
Melting point	Varies with alloy.
Specific Gravity	> 1 (H2O = 1)
Boiling point	343°C/650°F
Solubility in water	Partial (tin and lead components are not soluble).

9.2. Other information

Not applicable

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	Contact with chemical substances like acids or strong bases could cause generation of gas.
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10.2. Chemical stability

Chemical stability	This product is stable under normal conditions.
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10.3. Possibility of hazardous reactions

Not applicable

10.4. Conditions to avoid

Not applicable

10.5. Incompatible materials

Not applicable

10.6. Hazardous decomposition products

Not applicable

Other

This product is only intended for normal soldering purposes.

When this product is used in a soldering process, hazardous decomposition products would include those from the volatilization, reaction, or oxidation of the materials listed in Section 3, and those from the base metal and coating. Fumes from this product may contain compounds of the following chemical elements: Cl, Pb, Sn, Zn.

Refer to applicable national exposure limits for fume compounds, including those exposure limits for fume compounds found in Section 8.

Reasonably expected gaseous products would include carbon oxides, nitrogen oxides and ozone. Air contaminants around the welding area can be affected by the welding process and influence the composition and quantity of fumes and gases produced.

**SECTION 11: Toxicological information***11.1. Information on toxicological effects*

Information on toxicological effects	Inhalation of brazing and welding fumes and gases can be dangerous to your health. Classification of brazing and welding fumes is difficult because of varying base materials, coatings, air contamination and processes. The International Agency for Research on Cancer has classified welding fumes as possibly carcinogenic to humans (Group 2B).
Acute toxicity	Overexposure to soldering fumes may result in symptoms like metal fume fever, dizziness, nausea, dryness or irritation of the nose, throat or eyes.
Skin corrosion/irritation	No data available
Serious eye damage/irritation	No data available
Respiratory/skin sensitization	No data available
Germ cell mutagenicity	No data available
Genotoxicity	No data available
Carcinogenicity	No data available
Repeated dose toxicity	No data available
Reproductive toxicity	No data available
STOT-single exposure	No data available
STOT-repeated exposure	No data available
Aspiration hazard	No data available
LD50 Oral	No data available
LD50 Dermal	No data available
LC50 Inhalation	No data available
<i>Other</i>	
Long term effect	Overexposure to lead can cause reproductive, hematological and neurological effects. Lead is a suspect carcinogen.

SECTION 12: Ecological information*12.1. Toxicity*

Acute toxicity	No data available
Toxicity	No data available
Aquatic	No data available
Soil	No data available
Acute fish toxicity	No data available
Acute algae toxicity	No data available
Acute crustacean toxicity	No data available
Chronical toxicity	This product contains Zinc Chloride, which is classified by CLP Directive Regulation (EC) No 1272/2008 , as toxic to aquatic organisms and may cause long-term adverse effects in the aquatic environment.



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12.2. Persistence and degradability

Persistence and degradability No data available

Decay/transformation No data available

12.3. Bioaccumulative potential

Bioaccumulative potential No data available

12.4. Mobility in soil

Mobility No data available

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment No data available

12.6. Other adverse effects

Not applicable

Other

Contains zinc which may be toxic to aquatic species and is regulated as an environmental hazard in the European Union. This hazard is not anticipated from the handling of brazing consumables but is relevant if consumables enter natural waterways. Soldering consumables and materials could degrade/weather into components originating from the consumables or from the materials used in the soldering process. Avoid exposure to conditions that could lead to accumulation in soils or groundwater. Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal considerations

Discard any product, residue, disposable container or liner in an environmentally acceptable manner, in full compliance with federal and local regulations. Use recycling procedures if available. RCRA ID characteristic Toxic Hazardous Waste D008. (<https://rcrainfo.epa.gov/rcrainfoweb/action/modules/main/glossary/waste;jsessionid=A98F2456754BC0CE970C52F4E3AA429F>) Residues from brazing and welding consumables and processes could degrade and accumulate in soils and groundwater.

SECTION 14: Transport information

14.1. UN number

Not applicable

14.2. UN proper shipping name

Not applicable

14.3. Transport hazard class(es)

Not applicable

14.4. Packing group

Not applicable

14.5. Environmental hazards

Not applicable



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14.6. Special precautions for user

Not applicable

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

Other

U.S. Department of Transportation Ground (49CFR): Not dangerous goods
International Air Transportation (ICAO/IATA): Not dangerous goods
International Maritime Organization (IMO/IMDG): Not dangerous goods

SECTION 15: Regulatory information

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

EU regulations

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC.
Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006
Commission Regulation (EU) 2015/830 of 28 May 2015 amending Regulation (EC) No 1907/2006 of the European Parliament and the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)
DIRECTIVE 2008/98/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL. of 19 November 2008. on waste and repealing certain Directives.
European Parliament and Council Directive 94/62/EC of 20 December 1994 on packaging and packaging waste.



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Other regulations, limitations and legal regulations

Poland Regulations:

ACT of 25 February 2011 on the chemical substances and their mixtures(OJ # 63, poz. 322).

Regulation of the Minister of Labour and Social Policy of 6 June 2014 on Maximum Permissible Concentration and Intensity of Agents Harmful to Health in the Working Environment (Dz. u. z. 2014, poz 817).

The Act on Waste of 14 December 2012, Journal of Laws of 2013, item 21 with amendments

Act of 13th June 2013 on packaging management and packaging waste (Journal of Laws of 2013, item 888).

Regulation of the Minister of the Environment of 9 December 2014 on waste catalogue (Journal of Laws of 2014, item 1923).

Regulation of the Minister of Economy of 21 December 2005. Concerning essential requirements for personal protective equipment (Journal. Laws No. 259, item. 2173).

Regulation of the Minister of Health of 2 February 2011 on tests and measurements of factors harmful to health in the working environment (the Journal of Laws 2011, no. 33, item 166).

USA Regulations :

USA: This product contains or produces a chemical known to the state of California to cause cancer and birth defects (or other reproductive harm). (California Health & Safety Code § 25249.5 et seq.)

CERCLA/SARA Title III Reportable Quantities (RQs) and/or Threshold Planning Quantities (TPQs): Product is a solid solution in the form of a solid article. Spills or releases resulting in the loss of any ingredient at or above its RQ require immediate notification to the National Response Center and to your Local Emergency Planning Committee.

EPCRA/SARA Title III 313 Toxic Chemicals: The following metallic components are listed as SARA 313 "Toxic Chemicals" and potential subject to annual SARA 313 reporting. See Section 3 for weight percent.

International Inventories:

Australia: The substance(s) in this product is/are in compliance with the inventory requirements of Australian Inventory of Chemical Substances (AICS)

United States EPA Toxic Substance Control Act: All constituents of this product are on the TSCA inventory list or are excluded from listing.

Canadian Environmental Protection Act (CEPA): All constituent(s) of this product is/are on the Domestic Substance List (DSL).

15.2. Chemical safety assessment

Chemical safety assessment

No data available

Other

Read and understand the manufacturer's instructions, your employer's safety practices and the health and safety instructions on the label. Observe any federal and local regulations. Take precautions when welding and protect yourself and others.

WARNING: Welding fumes and gases are hazardous to your health and may damage lungs and other organs. Use adequate ventilation.

ELECTRIC SHOCK can kill. ARC RAYS and SPARKS can injure eyes and burn skin.

Wear correct hand, head, eye and body protection.

SECTION 16: Other information

Changes to previous revision

This Safety Data Sheet has been revised due to modifications to Sections 1-16.

References to key literature and data sources

Refer to ESAB "Welding and Cutting - Risks and Measures", F52-529 "Precautions and Safe Practices for Electric Welding and Cutting" and F2035 "Precautions and Safe Practices for Gas Welding, Cutting and Heating" available from ESAB, and to: www.esab.com



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Phrase meaning

Acute Tox. 4 - oral - Acute toxicity, oral, hazard category 4
Aquatic Acute 1 - Hazardous to the aquatic environment — Acute hazard category 1
Aquatic Chronic 1 - Hazardous to the aquatic environment — Chronic hazard category 1
Eye Irrit. 2 - Eye irritation, hazard category 2
Skin Corr. 1B - Skin corrosion, hazard category 1B
H302 - Harmful if swallowed.
H314 - Causes severe skin burns and eye damage.
H319 - Causes serious eye irritation.
H410 - Very toxic to aquatic life with long lasting effects.

Other

Additional information

USA: Contact ESAB at www.esabna.com or 1-800 ESAB-123 if you have any questions about this SDS. American National Standard Z49.1 Safety in Welding and Cutting, ANSI/AWS F1.5 Methods for Sampling and Analyzing Gases from Welding and Allied Processes, ANSI/AWS F1.1 "Method for Sampling Airborne Particles Generated by Welding and Allied Processes", AWSF3.2M/F3.2 "Ventilation Guide for Weld Fume", 550 North Le Jeune Road, Miami Florida 33135. Safety and Health Fact Sheets available from AWS at www.aws.org.

OSHA Publication 2206 (29 C.F.R. 1910), U.S. Government Printing Office, Superintendent of Documents, P.O. Box 371954, Pittsburgh, PA 15250-7954

American Conference of Governmental Hygienists (ACGIH), Threshold Limit Values and Biological Exposure Indices, 6500 Glenway Ave., Cincinnati, Ohio 45211, USA.

NFPA 51B "Standard for Fire Prevention During Welding, Cutting and Other Hot Work" published by the National Fire Protection Association, 1 Batterymarch Park, Quincy, MA 02169

UK: WMA Publication 236 and 237, "Hazards from Welding fume", "The arc welder at work, some general aspects of health and safety".

Germany: Accident prevention regulation BGV D1, "Welding, cutting and related procedures"

Canada: CSA Standard CAN/CSA-W117.2-01 "Safety in Welding, Cutting, and Allied Processes".

This product has been classified according to the hazard criteria of the CPR and the SDS contains all the information required by the CPR.

ESAB requests the users of this product to study this Safety Data Sheet (SDS) and become aware of product hazards and safety information. To promote safe use of this product a user should: notify its employees, agents and contractors of the information on this SDS and any product hazards/safety information. furnish this same information to each of its customers for the products

Request such customers to notify employees and customers for the same product hazards and safety information.

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