

Safety data sheet

according to 1907/2006/EC, Article 31 and 453/2010/EC

Printing date 22.05.2018

Version number 1

Revision: 19.01.2018

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

1.1 Product identifier

Trade name: **Soft solder and tinning paste PbSn(Sb), SnPb(Sb)**
Weichlöt und Verzinnungspaste PbSn(Sb), SnPb(Sb)
Sn 20,0-80,0%, Pb 20,0-80,0%, Sb 0,5-2,0%
Sn60Pb40, Pb60Sn40, Pb74Sn25Sb1

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

No further relevant information available.

1.3 Details of the supplier of the safety data sheet**Manufacturer/Supplier:**

Wullschleger AG
 Löttechnik-Edelmetalle
 Asylstrasse 25/CH-8800 Thalwil
 Schweiz

SOLDERIN S Verzinnungs-
 paste

Mail: wullschlegerag@bluewin.ch
 Home: www.wullschlegerag.ch

WULLSCHLEGER AG
EDELMETALLE
8800 THALWIL
TEL. 044 720 05 78

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture**Classification according to Regulation (EC) No 1272/2008**

GHS08 health hazard

Repr. 1A H360FD-H362 *May damage fertility. May damage the unborn child. May cause harm to breast-fed children.*

STOT RE 1 H372 *Causes damage to organs through prolonged or repeated exposure.*



GHS05 corrosion

Skin Corr. 1B H314 *Causes severe skin burns and eye damage.*

Eye Dam. 1 H318 *Causes serious eye damage.*



GHS09 environment

Aquatic Chronic 1 H410 *Very toxic to aquatic life with long lasting effects.*



GHS07

Acute Tox. 4 H302 *Harmful if swallowed.*

Acute Tox. 4 H332 *Harmful if inhaled.*

STOT SE 3 H335 *May cause respiratory irritation.*

2.2 Label elements**Labelling according to Regulation (EC) No 1272/2008**

The product is classified and labelled according to the CLP regulation.

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Hazard pictograms

GHS05 GHS07 GHS08 GHS09

Signal word *Danger***Hazard-determining components of labelling:***lead**zinc chloride**Benzenesulfonic acid, C10-13-alkyl derivs., sodium salts**Isotridecanol 6EO***Hazard statements***H302+H332 Harmful if swallowed or if inhaled.**H314 Causes severe skin burns and eye damage.**H360FD-H362 May damage fertility. May damage the unborn child. May cause harm to breast-fed children.**H335 May cause respiratory irritation.**H372 Causes damage to organs through prolonged or repeated exposure.**H410 Very toxic to aquatic life with long lasting effects.***Precautionary statements***P263 Avoid contact during pregnancy and while nursing.**P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].**P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.**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.***Additional information:***Restricted to professional users.***2.3 Other hazards****Results of PBT and vPvB assessment***PBT: Not applicable.**vPvB: Not applicable.*

SECTION 3: Composition/information on ingredients

3.2 Chemical characterisation: Mixtures*Description: Mixture: consisting of the following components.*

Dangerous components:		
CAS: 7439-92-1 EINECS: 231-100-4 Reg.nr.: 01-2119513221-59	<i>lead</i> ⚠ Repr. 1A, H360FD-H362; STOT RE 1, H372; ⚠ Aquatic Chronic 1, H410; ⚠ Acute Tox. 4, H302; Acute Tox. 4, H332	<50%
CAS: 7646-85-7 EINECS: 231-592-0 Reg.nr.: 01-2119472431-44	<i>zinc chloride</i> ⚠ Skin Corr. 1B, H314; ⚠ Aquatic Acute 1, H400; Aquatic Chronic 1, H410; ⚠ Acute Tox. 4, H302	<10%
CAS: 68411-30-3 EINECS: 270-115-0 Reg.nr.: 01-2119489428-22	<i>Benzenesulfonic acid, C10-13-alkyl derivs., sodium salts</i> ⚠ Eye Dam. 1, H318; ⚠ Acute Tox. 4, H302; Skin Irrit. 2, H315; Aquatic Chronic 3, H412	<10%
CAS: 69011-36-5	<i>Isotridecanol 6EO</i> ⚠ Eye Dam. 1, H318; ⚠ Acute Tox. 4, H302	<5%
CAS: 12125-02-9 EINECS: 235-186-4 Reg.nr.: 01-2119487950-27	<i>ammonium chloride</i> ⚠ Acute Tox. 4, H302; Eye Irrit. 2, H319	<2.5%

Additional information: *For the wording of the listed hazard phrases refer to section 16.*

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SECTION 4: First aid measures

4.1 Description of first aid measures

General information:

Immediately remove any clothing soiled by the product.

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

After inhalation:

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.

In case of unconsciousness place patient stably in side position for transportation.

After skin contact: *Immediately wash with water and soap and rinse thoroughly.*

After eye contact: *Rinse opened eye for several minutes under running water. Then consult a doctor.*

After swallowing:

Call for a doctor immediately.

Drink plenty of water and provide fresh air. Call for a doctor immediately.

4.2 Most important symptoms and effects, both acute and delayed *No further relevant information available.*

4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing agents: *Use fire extinguishing methods suitable to surrounding conditions.*

5.2 Special hazards arising from the substance or mixture *No further relevant information available.*

5.3 Advice for firefighters

Protective equipment: *Mouth respiratory protective device.*

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

6.2 Environmental precautions: *Do not allow to enter sewers/ surface or ground water.*

6.3 Methods and material for containment and cleaning up:

Use neutralising agent.

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

6.4 Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Thorough dedusting.

Ensure good ventilation/exhaustion at the workplace.

Information about fire - and explosion protection: *No special measures required.*

7.2 Conditions for safe storage, including any incompatibilities

Storage:

Requirements to be met by storerooms and receptacles: *No special requirements.*

Information about storage in one common storage facility: *Not required.*

Further information about storage conditions: *Keep container tightly sealed.*

Storage class: 6.1 C

7.3 Specific end use(s) *No further relevant information available.*

SECTION 8: Exposure controls/personal protection

Additional information about design of technical facilities: *No further data; see item 7.*

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8.1 Control parameters

Ingredients with limit values that require monitoring at the workplace:	
7439-92-1 lead	
AGW (EU)	Long-term value: 0.15 mg/m ³
BOELV (EU)	Long-term value: 0.15 mg/m ³ as Pb
MAK (Germany)	vgl. Abschn. XII
7440-31-5 tin	
MAK (Germany)	vgl. Abschn. IIb
7646-85-7 zinc chloride	
MAK (Germany)	Long-term value: 0.1A* 2E** mg/m ³ *alveolengängig; **einatembare

Regulatory information

BOELV (EU): 98/24/EG

MAK (Germany): MAK- und BAT-Liste

recommended monitoring procedures in accordance with 453/2010/EU no. 8.1.2:

7439-92-1 lead: NIOSH 7702(E), OSHA 1006(E), OSHA ID-206(E)

7646-85-7 zinc chloride: NIOSH 7300, 7301, 7303(E) "Zinc", OSHA, ID-121(E)

Ingredients with biological limit values:	
7439-92-1 lead	
BAT (EU)	70 µg/dl blood lead
BGW (Germany)	300 µg/l Untersuchungsmaterial: Vollblut Probennahmezeitpunkt: keine Beschränkung Parameter: Blei Frauen < 45 J.
	400 µg/l Untersuchungsmaterial: Vollblut Probennahmezeitpunkt: keine Beschränkung Parameter: Blei

Regulatory information BGW (Germany): TRGS 903

Additional information: The lists valid during the making were used as basis.

8.2 Exposure controls

Appropriate engineering controls:

Ensure adequate ventilation.

Remove the fumes by means of suitable suction devices.

Personal protective equipment:

General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Store protective clothing separately.

Avoid contact with the eyes and skin.

Respiratory protection:

Use suitable respiratory protective device in case of insufficient ventilation.

Filter P3

Protection of hands:



Protective gloves

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

Material of gloves

Nitrile rubber, NBR

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material cannot be calculated in advance and has therefore to be checked prior to the application.

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SOLDERIN S Verzinnungspaste

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Recommended thickness of the material: ≥ 0.2 mm**Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed. The determined penetration times according to EN 374 part III are not performed under practical conditions. Therefore a maximum wearing time, which corresponds to 50% of the penetration time, is recommended.

Value for the permeation: Level ≤ 6

As protection from splashes gloves made of the following materials are suitable: Nitrile rubber, NBR

Eye protection:

Tightly sealed goggles

Body protection: Protective work clothing

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties**General Information****Appearance:**

Form:	Pasty
Colour:	Silver grey
Odour:	Characteristic
Odour threshold:	Not determined.
pH-value at 20 °C:	4.1

Change in condition

Initial boiling point and boiling range:	100 °C
Flash point:	Not applicable.
Flammability (solid, gas):	Not determined.
Decomposition temperature:	Not determined.
Auto-ignition temperature:	Product is not selfigniting.
Explosive properties:	Product does not present an explosion hazard.
Explosion limits:	
Lower:	Not determined.
Upper:	Not determined.
Vapour pressure at 20 °C:	23 hPa
Density at 20 °C:	6.19 g/cm ³
Relative density	Not determined.
Vapour density	Not applicable.
Evaporation rate	Not applicable.
Solubility in / Miscibility with water:	Insoluble.
Partition coefficient: n-octanol/water:	Not determined.
Viscosity:	
Dynamic:	Not applicable.
Kinematic:	Not applicable.
Solvent content:	
VOC (EC)	0.00 %
9.2 Other information	No further relevant information available.

SECTION 10: Stability and reactivity

10.1 Reactivity No further relevant information available.**10.2 Chemical stability****Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.**10.3 Possibility of hazardous reactions** No dangerous reactions known.**10.4 Conditions to avoid** No further relevant information available.**10.5 Incompatible materials:** No further relevant information available.

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SOLDERIN S Verzinnungspaste

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10.6 Hazardous decomposition products: No dangerous decomposition products known.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Harmful if swallowed or if inhaled.

LD/LC50 values relevant for classification:

7646-85-7 zinc chloride

Oral	LD50	1,100-1,260 mg/kg (rat)
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Primary irritant effect:

Skin corrosion/irritation

Causes severe skin burns and eye damage.

Serious eye damage/irritation

Causes serious eye damage.

Respiratory or skin sensitisation Based on available data, the classification criteria are not met.

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

Germ cell mutagenicity Based on available data, the classification criteria are not met.

Carcinogenicity Based on available data, the classification criteria are not met.

Reproductive toxicity

May damage fertility. May damage the unborn child. May cause harm to breast-fed children.

STOT-single exposure

May cause respiratory irritation.

STOT-repeated exposure

Causes damage to organs through prolonged or repeated exposure.

Aspiration hazard Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

12.1 Toxicity

Aquatic toxicity: No further relevant information available.

12.2 Persistence and degradability No further relevant information available.

12.3 Bioaccumulative potential No further relevant information available.

12.4 Mobility in soil No further relevant information available.

Additional ecological information:

General notes:

Water hazard class 3 (German Regulation) (Self-assessment): extremely hazardous for water

Do not allow product to reach ground water, water course or sewage system, even in small quantities.

Must not reach sewage water or drainage ditch undiluted or unneutralised.

Danger to drinking water if even extremely small quantities leak into the ground.

Also poisonous for fish and plankton in water bodies.

12.5 Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

12.6 Other adverse effects No further relevant information available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Recommendation

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

European waste catalogue

16 05 07*: discarded inorganic chemicals consisting of or containing hazardous substances

HP 5: Specific Target Organ Toxicity (STOT)/Aspiration Toxicity

HP 6: Acute Toxicity

HP 8: Corrosive

HP 10: Toxic for reproduction

HP 14: Ecotoxic

cleaned plastic bottle:

15 01 02: plastic packaging

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Uncleaned packaging: 15 01 10*: packaging containing residues of or contaminated by hazardous substances

Recommendation: Disposal must be made according to official regulations.

Recommended cleansing agents:

Remove residues mechanically, clean the packaging with soap solution or with alcohol.

SECTION 14: Transport information

14.1 UN-Number

ADR, IMDG, IATA

UN2923

14.2 UN proper shipping name

ADR

2923 CORROSIVE SOLID, TOXIC, N.O.S. (ZINC CHLORIDE, lead), ENVIRONMENTALLY HAZARDOUS CORROSIVE SOLID, TOXIC, N.O.S. (ZINC CHLORIDE, lead), MARINE POLLUTANT CORROSIVE SOLID, TOXIC, N.O.S. (ZINC CHLORIDE, lead)

IMDG

IATA

14.3 Transport hazard class(es)

ADR



Class

8 Corrosive substances.

Label

8+6.1

IMDG



Class

8 Corrosive substances.

Label

8/6.1

IATA



Class

8 Corrosive substances.

Label

8 (6.1)

14.4 Packing group

ADR, IMDG, IATA

III

14.5 Environmental hazards:

Marine pollutant:

Special marking (ADR):

14.6 Special precautions for user

Danger code (Kemler):

EMS Number:

Segregation groups

Stowage Category

Stowage Code

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

Product contains environmentally hazardous substances:
lead, zinc chloride

Symbol (fish and tree)

Symbol (fish and tree)

Warning: Corrosive substances.

86

F-A, S-B

Acids

B

SW2 Clear of living quarters.

Not applicable.

Transport/Additional information:

ADR

Limited quantities (LQ)

5 kg

Excepted quantities (EQ)

Code: E1

Maximum net quantity per inner packaging: 30 g

Maximum net quantity per outer packaging: 1000 g

Transport category

3

Tunnel restriction code

E

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IMDG

Limited quantities (LQ)

1 kg

Excepted quantities (EQ)

Code: E2

Maximum net quantity per inner packaging: 30 g

Maximum net quantity per outer packaging: 500 g

UN "Model Regulation":

 UN 2923 CORROSIVE SOLID, TOXIC, N.O.S. (ZINC
 CHLORIDE, LEAD), 8 (6.1), III, ENVIRONMENTALLY
 HAZARDOUS

SECTION 15: Regulatory information

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

Directive 2012/18/EU

Named dangerous substances - ANNEX I None of the ingredients is listed.

Seveso category E1 Hazardous to the Aquatic Environment

Qualifying quantity (tonnes) for the application of lower-tier requirements 100 t

Qualifying quantity (tonnes) for the application of upper-tier requirements 200 t

REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 63, 65

National regulations:

Information about limitation of use: Employment restrictions concerning juveniles must be observed.

Waterhazard class: Water hazard class 3 (Self-assessment): extremely hazardous for water.

15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Relevant phrases

H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

H315 Causes skin irritation.

H318 Causes serious eye damage.

H319 Causes serious eye irritation.

H332 Harmful if inhaled.

H360FD May damage fertility. May damage the unborn child.

H362 May cause harm to breast-fed children.

H372 Causes damage to organs through prolonged or repeated exposure.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

H412 Harmful to aquatic life with long lasting effects.

Recommended restriction of use For commercial use only.

Contact: Herr Wullschlegler

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

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

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)

VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Acute Tox. 4: Acute toxicity - Category 4

Skin Corr. 1B: Skin corrosion/irritation - Category 1B

Skin Irrit. 2: Skin corrosion/irritation - Category 2

Eye Dam. 1: Serious eye damage/eye irritation - Category 1

Eye Irrit. 2: Serious eye damage/eye irritation - Category 2

Repr. 1A: Reproductive toxicity - Category 1A

STOT SE 3: Specific target organ toxicity (single exposure) - Category 3

STOT RE 1: Specific target organ toxicity (repeated exposure) - Category 1

Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard - Category 1

Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard - Category 1

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Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard - Category 3

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