

Safety data sheet

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

Printing date 17.05.2016

Version number 3

Revision: 17.05.2016

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

1.1 Product identifier

Trade name: Weichlotlegierung "bleihaltig" SnPb(P), PbSn(P), SnPb(Cu)(Ag)
Soft solder, leaded, SnPb(P), PbSn(P), SnPb(Cu)(Ag)
Sn 60,0-67,0% ; Pb 33,0-40,0% ; Cu 0,0- 2,0%
Ag 0,0- 4,0% ; P 0,0- 0,8%
S-Sn63Pb37E, S-Sn60Pb40, S-Sn60Pb39Cu1, S-Sn60Pb38Cu2,
S-Sn60Pb36Ag4, S-Sn62Pb36Ag2, Sn60Pb40P, KD60/40

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

No further relevant information available.

Application of the substance / the mixture *Brazing alloy*

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

Felder GmbH
 Im Lipperfeld 11
 D-46047 Oberhausen

Tel.: +49 (0)208/ 85035-0

Fax.: +49 (0)208/ 26080

<http://www.felder.de>

e-mail: info@felder.de

Further information obtainable from:

Labor

(Mo-Do. 8:00-16:00/ Fr. 8:00-13:00)

Tel.: +49(0)208/ 8 50 35-0

e-mail: mprobst@felder.de

1.4 Emergency telephone number: *Not necessary, due to the fact that the product does not need to be labelled.*

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

The product is not classified according to the CLP regulation.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008 *Void*

Hazard pictograms *Void*

Signal word *Void*

Hazard statements *Void*

Additional information:

Safety data sheet available on request.

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: 7440-22-4 EINECS: 231-131-3 Reg.nr.: 01-2119555669-21	silver	substance with a Community workplace exposure limit	0-<4%
CAS: 7440-50-8 EINECS: 231-159-6 Reg.nr.: 01-2119480154-42	copper	substance with a Community workplace exposure limit	0-<2%
CAS: 7439-92-1 EINECS: 231-100-4 Reg.nr.: 01-2119513221-59	lead	substance with a Community workplace exposure limit	33<40%

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

SECTION 4: First aid measures

4.1 Description of first aid measures

General information: Take affected persons out into the fresh air.

After inhalation: Supply fresh air; consult doctor in case of complaints.

After skin contact:

After contact with the molten product, cool rapidly with cold water.

Do not pull solidified product off the skin.

Seek medical treatment.

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

After swallowing:

Induce vomiting and call for medical help.

Rinse out mouth and then drink plenty of water.

Seek medical treatment.

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:

CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

5.2 Special hazards arising from the substance or mixture

Formation of toxic gases is possible during heating or in case of fire.

5.3 Advice for firefighters

Protective equipment: Do not inhale explosion gases or combustion gases.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Use respiratory protective device against the effects of fumes/dust/aerosol.

Wear protective clothing.

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

6.3 Methods and material for containment and cleaning up: Allow to solidify. Pick up mechanically.

6.4 Reference to other sections

No dangerous substances are released.

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

Extractors are required on all machines used for thermal processing or splinter removal processes.

Provide suction extractors if dust is formed.

Any unavoidable deposit of dust must be regularly removed.

Use appropriate industrial vacuum cleaners or central vacuum systems for dust removal.

No special measures required.

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: Store away from foodstuffs.

Further information about storage conditions: Store in dry conditions.

Storage class: 10-13

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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.

8.1 Control parameters

Ingredients with limit values that require monitoring at the workplace:	
7440-31-5 tin	
MAK (Germany)	vgl. Abschn. IIb
7439-92-1 lead	
MAK (Germany)	vgl. Abschn. XII
AGW (EU)	Long-term value: 0,15 mg/m ³
7440-22-4 silver	
AGW (Germany)	Long-term value: 0,1 E mg/m ³ 8(II); DFG, EU
IOELV (EU)	Long-term value: 0,1 mg/m ³
7440-50-8 copper	
MAK (Germany)	Long-term value: 0,01 A mg/m ³ als Cu

Regulatory information

MAK (Germany): MAK- und BAT-Liste

AGW (Germany): TRGS 900

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)

7440-50-8 copper: BIA 7755 (D), NIOSH 7301(E), MétroPol Fiche 003(F), MTA/MA-025/A92(ESP)

7440-22-4 silver: ISO 15202(F, E), BIA 8600(D), NIOSH 7301(E)

Ingredients with biological limit values:	
7439-92-1 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
BAT (EU)	70 µg/dl blood lead

Regulatory information BGW (Germany): TRGS 903

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

8.2 Exposure controls

Personal protective equipment:

General protective and hygienic measures:

Pregnant women should strictly avoid inhalation or skin contact.

Do not eat, drink, smoke or sniff while working.

Respiratory protection:

Use suitable respiratory protective device in case of insufficient ventilation.

Filter P2

Protection of hands:

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

Material of gloves

Natural rubber, NR

Nitrile rubber, NBR

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

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Recommended thickness of the material: $\geq 0,2$ mm

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.

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

Eye protection: Safety glasses

Body protection: Protective work clothing

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

General Information

Appearance:

Form:	Solid
Colour:	Silver grey
Odour:	Odourless
Odour threshold:	Not determined.
pH-value:	Not applicable.

Change in condition

Boiling point/Boiling range:	Undetermined.
Flash point:	Not applicable.
Flammability (solid, gaseous):	Not determined.

Ignition temperature:

Decomposition temperature:	Not determined.
Self-igniting:	Product is not selfigniting.
Danger of explosion:	Product does not present an explosion hazard.

Explosion limits:

Lower:	Not determined.
Upper:	Not determined.

Vapour pressure:

Density:	Not determined.
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:

Organic solvents:	0,0 %
VOC (EC)	0,00 %
Solids content:	100,0 %

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 and stored according to specifications.

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10.3 Possibility of hazardous reactions*Toxic fumes may be released if heated above the decomposition point.**Reacts with strong acids and alkali.**Reacts with strong oxidising agents.***10.4 Conditions to avoid** *No further relevant information available.***10.5 Incompatible materials:** *No further relevant information available.***10.6 Hazardous decomposition products:***Toxic metal oxide smoke**Leadoxide vapour*

SECTION 11: Toxicological information

11.1 Information on toxicological effects**Acute toxicity** *Based on available data, the classification criteria are not met.***Primary irritant effect:****Skin corrosion/irritation** *Based on available data, the classification criteria are not met.***Serious eye damage/irritation** *Based on available data, the classification criteria are not met.***Respiratory or skin sensitisation** *Based on available data, the classification criteria are not met.***CMR effects (carcinogenity, 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** *Based on available data, the classification criteria are not met.***STOT-single exposure** *Based on available data, the classification criteria are not met.***STOT-repeated exposure** *Based on available data, the classification criteria are not met.***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:***Due to the consistence and the low watersolubility of the product a bioavailability is not probable.**The product contains heavy metals. Avoid transfer into the environment. Specific preliminary treatments are necessary**Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water**Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.***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** *Contact manufacturer for recycling information.***European waste catalogue**17 04 07 | *mixed metals***Uncleaned packaging:****Recommendation:** *Disposal must be made according to official regulations.*

SECTION 14: Transport information

14.1 UN-Number

ADR, ADN, IMDG, IATA

Void

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14.2 UN proper shipping name	
ADR, ADN, IMDG, IATA	Void
14.3 Transport hazard class(es)	
ADR, ADN, IMDG, IATA	
Class	Void
14.4 Packing group	
ADR, IMDG, IATA	Void
14.5 Environmental hazards:	
Marine pollutant:	No
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.
UN "Model Regulation":	Void

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.*

National regulations:

Additional classification according to Decree on Hazardous Materials, Annex II:

Can cause cancer if present as respirable dust.

Information about limitation of use:

Employment restrictions concerning pregnant and lactating women must be observed.

Employment restrictions concerning women of child-bearing age must be observed.

Employment restrictions concerning juveniles must be observed.

Waterhazard class: *Water hazard class 1 (Self-assessment): slightly 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.

Reasons for changes:

25.08.2015: chapter 3: lead, chapter 7: storage class

adaption to regulation 453/2010/EG, 830/2015/EU, 2012/18/EU

04.05.2016: chapter 8.2

Contact: *Dr. M. Probst*

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)

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

DNEL: Derived No-Effect Level (REACH)

PNEC: Predicted No-Effect Concentration (REACH)

LC50: Lethal concentration, 50 percent

SVHC: Substances of Very High Concern

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