

**Safety data sheet**  
according to 1907/2006/EC, Article 31 and 2020/878/EU

Printing date 04.02.2022

Version number 4

Revision: 03.02.2022

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

**1.1 Product identifier**

Trade name: Lagermetall SnSb12Cu6Pb (WM80)  
UFI: PDR8-20ME-U00T-T38S

**FELDER**  
seit 1979  
LÖTTECHNIK

**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](mailto:info@felder.de)

**Further information obtainable from:**

*lab*

(mo-thu. 8:00 a.m. - 4:00 p.m./ fr. 8:00 a.m. - 1:00 p.m.)

email: [mprobst@felder.de](mailto:mprobst@felder.de)

**1.4 Emergency telephone number: Tel: +49(0) 208/85035 29**

**Information which should have been included on the identification label.**

**(Annex I No. 1.3.4 REGULATION (EC) No 1272/2008)**

*Metals in massive form, alloys, mixtures containing polymers and mixtures containing elastomers do not require a label*

*according to this Annex, 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 chapter 2.2

**EuPCs: PC-TEC-24**

**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 2 H373 *May cause damage to organs through prolonged or repeated exposure.*

**2.2 Label elements**

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

*The product is classified according to the CLP regulation. A label is not required (CLP Annex I, 1.3.4.1.)*  
*The information according to CLP Annex I, 1.3.4.2. will be announced in section 2.2.*

**Hazard pictograms**



GHS08

**Signal word** *Danger*

**Hazard-determining components of labelling:**

*lead*

**Hazard statements**

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

*H373 May cause damage to organs through prolonged or repeated exposure.*

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**Precautionary statements**

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

P263 Avoid contact during pregnancy and while nursing.

P264 Wash thoroughly after handling.

P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.

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 Mixtures****Description:** Mixture: consisting of the following components.

Dangerous components:			
CAS: 7440-31-5 EINECS: 231-141-8 Reg.nr.: 01-2119486474-28	tin	substance with a Community workplace exposure limit	77-83%
CAS: 7440-36-0 EINECS: 231-146-5 Reg.nr.: 01-2119475609-24	antimony	substance with a Community workplace exposure limit	11-13%
CAS: 7440-50-8 EINECS: 231-159-6 Index number: 029-024-00-X Reg.nr.: 01-2119480154-42	copper	 Aquatic Chronic 2, H411	5-7%
CAS: 7439-92-1 EINECS: 231-100-4 Index number: 082-014-00-7 Reg.nr.: 01-2119513221-59	lead	                   <img alt="Hazardous to the environment hazard symbol	

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**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**

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.**Ensure that suitable extractors are available on processing machines***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:** 6.1 C**7.3 Specific end use(s)** No further relevant information available.**SECTION 8: Exposure controls/personal protection****8.1 Control parameters****Ingredients with limit values that require monitoring at the workplace:****7440-31-5 tin**

MAK (Germany)	vgl.Abschn.IIb
OEL (Ireland)	Short-term value: 0.2** mg/m <sup>3</sup> Long-term value: 2* 0.1** mg/m <sup>3</sup> /OELV, *metal, oxide, inorg.compds., **org. compds.

**7440-36-0 antimony**

MAK (Germany)	vgl.Abschn.XII
WEL (Great Britain)	Long-term value: 0.5 mg/m <sup>3</sup> as Sb
OEL (Ireland)	Long-term value: 0.5 mg/m <sup>3</sup> as Sb

**7440-50-8 copper**

MAK (Germany)	Long-term value: 0.01 A mg/m <sup>3</sup> als Cu
WEL (Great Britain)	Short-term value: 2** mg/m <sup>3</sup> Long-term value: 0.2* 1** mg/m <sup>3</sup> *fume **dusts and mists (as Cu)
OEL (Ireland)	Long-term value: 0.2* 1** mg/m <sup>3</sup> *fume **dusts and mists

**7439-92-1 lead**

AGW (EU)	Long-term value: 0.15 mg/m <sup>3</sup>
BOELV (EU)	Long-term value: 0.15 mg/m <sup>3</sup> as Pb
MAK (Germany)	vgl.Abschn.XII
OEL (Ireland)	Long-term value: 0.15 mg/m <sup>3</sup> Repr1A, BOELV

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**Regulatory information**

MAK (Germany): MAK- und BAT-Liste

OEL (Ireland): 2021 CoP for the Safety, Health and Welfare at Work

WEL (Great Britain): EH40/2020

BOELV (EU): 2004/37/EG (EU/2019/983)

**recommended monitoring procedures in accordance with 2020/878/EU no. 8.1.2:**

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

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

7440-36-0 antimony: BIA 7175(D); MétroPol Fiche 003(F); NIOSH 7300, 7301, 7303(E)

7440-31-5 tin: NIOSH 7300, 7301, 7303(E), OSHA ID-121, ISO15202(E,F), MTA/MA-025/A92(ESP)

**Ingredients with biological limit values:****7439-92-1 lead**

BAT (EU)	70 µg/dl blood lead
BGW (Germany)	150 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** No further data; see item 7.**Appropriate engineering controls:**

Ensure adequate ventilation.

Remove the fumes by means of suitable suction devices.

**Individual protection measures, such as 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

**Hand protection** Leather gloves**Penetration time of glove material** Value for the permeation: Level  $\leq$  n.b.**Eye/face protection** in cases of application: protective goggles**Body protection:** Protective work clothing**SECTION 9: Physical and chemical properties****9.1 Information on basic physical and chemical properties****General Information**

Colour:	Silver-coloured
Odour:	Odourless
Odour threshold:	Not determined.
Melting point/freezing point:	183-400 °C
Boiling point or initial boiling point and boiling range	Undetermined.
Flammability	Not determined.
Lower and upper explosion limit	
Lower:	Not determined.
Upper:	Not determined.
Flash point:	Not applicable.
Auto-ignition temperature:	Product is not selfigniting.
Decomposition temperature:	Not determined.
pH	Not applicable.
Viscosity:	
Kinematic viscosity	Not applicable.
Dynamic:	Not applicable.
Solubility	
water:	Insoluble.
Partition coefficient n-octanol/water (log value)	Not determined.
Vapour pressure:	Not applicable.

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**Density and/or relative density**

<b>Density:</b>	<i>Not determined.</i>
<b>Relative density at 20 °C</b>	7.39
<b>Vapour density</b>	<i>Not applicable.</i>
<b>Particle characteristics</b>	See item 3.

**9.2 Other information****Appearance:**

<b>Form:</b>	<i>Solid</i>
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**Important information on protection of health and environment, and on safety.****Explosive properties:** *Product does not present an explosion hazard.***Solvent content:**

<b>Organic solvents:</b>	0.0 %
<b>VOC (EC)</b>	0,00 %

**Solids content:**

<b>Solids content:</b>	100.0 %
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**Change in condition****Evaporation rate***Not applicable.***Information with regard to physical hazard classes**

<b>Explosives</b>	<i>Void</i>
<b>Flammable gases</b>	<i>Void</i>
<b>Aerosols</b>	<i>Void</i>
<b>Oxidising gases</b>	<i>Void</i>
<b>Gases under pressure</b>	<i>Void</i>
<b>Flammable liquids</b>	<i>Void</i>
<b>Flammable solids</b>	<i>Void</i>
<b>Self-reactive substances and mixtures</b>	<i>Void</i>
<b>Pyrophoric liquids</b>	<i>Void</i>
<b>Pyrophoric solids</b>	<i>Void</i>
<b>Self-heating substances and mixtures</b>	<i>Void</i>
<b>Substances and mixtures, which emit flammable gases in contact with water</b>	<i>Void</i>
<b>Oxidising liquids</b>	<i>Void</i>
<b>Oxidising solids</b>	<i>Void</i>
<b>Organic peroxides</b>	<i>Void</i>
<b>Corrosive to metals</b>	<i>Void</i>
<b>Desensitised explosives</b>	<i>Void</i>

**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.***10.3 Possibility of hazardous reactions***Toxic fumes may be released if heated above the decomposition point.**Reacts with acids, alkalis and 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***SECTION 11: Toxicological information****11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008****Acute toxicity** *Based on available data, the classification criteria are not met.***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.***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** *Based on available data, the classification criteria are not met.*

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**STOT-repeated exposure***May cause damage to organs through prolonged or repeated exposure.***Aspiration hazard** Based on available data, the classification criteria are not met.**11.2 Information on other hazards****Endocrine disrupting properties***None of the ingredients is listed.***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.**12.5 Results of PBT and vPvB assessment****PBT:** Not applicable.**vPvB:** Not applicable.**12.6 Endocrine disrupting properties***The product does not contain substances with endocrine disrupting properties.***12.7 Other adverse effects****Additional ecological information:****General notes:***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.***SECTION 13: Disposal considerations****13.1 Waste treatment methods****Recommendation** Contact manufacturer for recycling information.**European waste catalogue**

17 04 09*	metal waste contaminated with hazardous substances
HP5	Specific Target Organ Toxicity (STOT)/Aspiration Toxicity
HP10	Toxic for reproduction
HP14	Ecotoxic

**Uncleaned packaging:****Recommendation:** Disposal must be made according to official regulations.**SECTION 14: Transport information****14.1 UN number or ID number**ADR, ADN, IMDG, IATA Void**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 Maritime transport in bulk according to IMO**instruments Not applicable.UN "Model Regulation": Void

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## 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.*

REGULATION (EU) 2019/1021 on persistent organic pollutants (POP) *None of the ingredients are listed.*

REGULATION (EC) No 1907/2006 ANNEX XVII *Conditions of restriction: 30, 63, 72*

DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II	
7439-92-1	lead
<b>REGULATION (EU) 2019/1148</b>	
<b>Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))</b>	
<i>None of the ingredients is listed.</i>	
<b>Annex II - REPORTABLE EXPLOSIVES PRECURSORS</b>	
<i>None of the ingredients is listed.</i>	
<b>Regulation (EC) No 273/2004 on drug precursors</b>	
<i>None of the ingredients is listed.</i>	
<b>Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors</b>	
<i>None of the ingredients is listed.</i>	

#### National regulations:

##### 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.

#### Other regulations, limitations and prohibitive regulations

<b>Substances of very high concern (SVHC) according to REACH, Article 57</b>	
7439-92-1	lead

**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:

08.11.2016: adaption to Regulation 830/2015/EU, 2012/18/EU

14.11.2018: section 2, 3, 7, 13, 15

02.02.2022: section 1, 3, 13, 15, 16

Information referred to in Annex I, point 1.3.4.2 of Regulation 1272/2008/EC:

#### Relevant phrases

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.*

H411 *Toxic to aquatic life with long lasting effects.*

Contact: Dr. M. Probst

Version number of previous version: 3

#### Abbreviations and acronyms:

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)

ICAO: International Civil Aviation Organisation

ICAO-TI: Technical Instructions by the "International Civil Aviation Organisation" (ICAO)

ADR: Accord relatif au transport international 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

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CAS: Chemical Abstracts Service (division of the American Chemical Society)

VOC: Volatile Organic Compounds (USA, EU)

PBT: Persistent, Bioaccumulative and Toxic

SVHC: Substances of Very High Concern

vPvB: very Persistent and very Bioaccumulative

Repr. 1A: Reproductive toxicity – Category 1A

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

STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2

Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2

**Safety data sheet SD3161**

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