

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**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:**

lab

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

email: 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.

(Contd. on page 2)

— EU —

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

Trade name: Lagermetall SnSb12Cu6Pb (WM80)

(Contd. of page 1)

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	 Repr. 1A, H360FD-H362; STOT RE 1, H372	1-3%

SVHC

7439-92-1 | lead

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: Rinse out mouth and then drink plenty of water.

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.

(Contd. on page 3)

— EU —

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

Trade name: Lagermetall SnSb12Cu6Pb (WM80)

(Contd. of page 2)

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/m³**Long-term value: 2* 0.1** mg/m³**IOELV, *metal, oxide, inorg. compds., **org. compds.***7440-36-0 antimony**

MAK (Germany)

vgl. Abschn. XII

WEL (Great Britain)

*Long-term value: 0.5 mg/m³**as Sb*

OEL (Ireland)

*Long-term value: 0.5 mg/m³**as Sb***7440-50-8 copper**

MAK (Germany)

*Long-term value: 0.01 A mg/m³**als Cu*

WEL (Great Britain)

*Short-term value: 2** mg/m³**Long-term value: 0.2* 1** mg/m³***fume **dusts and mists (as Cu)*

OEL (Ireland)

Long-term value: 0.2 1** mg/m³***fume **dusts and mists***7439-92-1 lead**

AGW (EU)

Long-term value: 0.15 mg/m³

BOELV (EU)

*Long-term value: 0.15 mg/m³**as Pb*

MAK (Germany)

vgl. Abschn. XII

OEL (Ireland)

*Long-term value: 0.15 mg/m³**Repr1A, BOELV*

(Contd. on page 4)

— EU —

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

Trade name: Lagermetall SnSb12Cu6Pb (WM80)

(Contd. of page 3)

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 Probenahmezeitpunkt: 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 ≤ 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.

(Contd. on page 5)

EU —

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

Trade name: Lagermetall SnSb12Cu6Pb (WM80)

(Contd. of page 4)

Density and/or relative density**Density:***Not determined.***Relative density at 20 °C**

7.39

Vapour density*Not applicable.***Particle characteristics***See item 3.***9.2 Other information****Appearance:****Form:***Solid***Important information on protection of health and environment, and on safety.****Explosive properties:***Product does not present an explosion hazard.***Solvent content:****Organic solvents:**

0.0 %

VOC (EC)

0.00 %

Solids content:

100.0 %

Change in condition**Evaporation rate***Not applicable.***Information with regard to physical hazard classes****Explosives***Void***Flammable gases***Void***Aerosols***Void***Oxidising gases***Void***Gases under pressure***Void***Flammable liquids***Void***Flammable solids***Void***Self-reactive substances and mixtures***Void***Pyrophoric liquids***Void***Pyrophoric solids***Void***Self-heating substances and mixtures***Void***Substances and mixtures, which emit flammable gases in contact with water***Void***Oxidising liquids***Void***Oxidising solids***Void***Organic peroxides***Void***Corrosive to metals***Void***Desensitised explosives***Void***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.*

(Contd. on page 6)

— EU —

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

Trade name: Lagermetall SnSb12Cu6Pb (WM80)

(Contd. of page 5)

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

(Contd. on page 7)

— EU —

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

Trade name: Lagermetall SnSb12Cu6Pb (WM80)

(Contd. of page 6)

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

REGULATION (EU) 2019/1148

Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))

None of the ingredients is listed.

Annex II - REPORTABLE EXPLOSIVES PRECURSORS

None of the ingredients is listed.

Regulation (EC) No 273/2004 on drug precursors

None of the ingredients is listed.

Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors

None of the ingredients is listed.

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

Substances of very high concern (SVHC) according to REACH, Article 57

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

(Contd. on page 8)

— EU —

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

Trade name: Lagermetall SnSb12Cu6Pb (WM80)

(Contd. of page 7)

*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**

EU
