



Safety data sheet according to Regulation (EC) No 1907/2006, Article 31

Printing date 12.11.2025

Version number 6.2 (replaces version 6.1)

Revision: 12.11.2025

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

1.1 Product identifier

Trade name: Loetdraht HF32 Sn63Pb37

Loetdraht HF32 Sn60Pb40

Loetdraht HF32 Pb50Sn50

Loetdraht HF32 Pb60Sn40

· UFI: 8EW2-40K2-G000-DFGG

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

Drinking water installations, use in food technology. Use in medical technology. Temperatures > 500 ° C

· Technical function soldering

· Application of the substance / the mixture Brazing alloy

1.3 Details of the supplier of the safety data sheet

· Manufacturer/Supplier:

Stannol GmbH & Co. KG

Haberstrasse 24

D-42551 Velbert

+49 (0) 2051 3120 332

sdb@stannol.de

· Further information obtainable from: Product Safety Department

· 1.4 Emergency telephone number: 8:00 am - 5:00 pm (CET) +49 (0) 2051 3120 332

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

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 the central nervous system, the kidneys and the blood through prolonged or repeated exposure.

Aquatic Acute 1 H400 Very toxic to aquatic life.

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

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008

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

Hazard pictograms



GHS08



GHS09

· 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.

H372 Causes damage to the central nervous system, the kidneys and the blood through prolonged or repeated exposure.

H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements

P201 Obtain special instructions before use.

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

P270 Do not eat, drink or smoke when using this product.



Safety data sheet

according to Regulation (EC) No 1907/2006, Article 31

Printing date 12.11.2025

Version number 6.2 (replaces version 6.1)

Revision: 12.11.2025

Trade name: Loetdraht HF32 Sn63Pb37
Loetdraht HF32 Sn60Pb40
Loetdraht HF32 Pb50Sn50
Loetdraht HF32 Pb60Sn40

(Contd. of page 1)

- P273 Avoid release to the environment.
P280 Wear protective clothing / eye protection.
P280 Wear protective gloves.
P308+P313 IF exposed or concerned: Get medical advice/attention.
P314 Get medical advice/attention if you feel unwell.
P391 Collect spillage.
P405 Store locked up.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Additional information:

EUH201A Warning! Contains lead.
Restricted to professional users.

2.3 Other hazards

Solder wires / solder pastes:

Inhalation of vapors released during the soldering process should be avoided. Flux vapors irritate the nose, throat, and respiratory tract, and can lead to allergic reactions (asthma) after prolonged or repeated contact. Therefore, an active suction is recommended.

After working with the product and before eating, drinking or smoking, wash your hands with soap and water.

Do not heat above 500 °C.

Keep out of the reach of children.

Results of PBT and vPvB assessment

- **PBT:** Not applicable.
- **vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

- **Description:** Mixture of substances listed below with nonhazardous additions.

Dangerous components:

CAS: 7439-92-1	Lead	25 - 65%
EINECS: 231-100-4	Repr. 1A, H360FD-H362; STOT RE 1, H372	
Index number: 082-013-00-1	Aquatic Acute 1, H400 (M=10); Aquatic Chronic 1, H410 (M=100)	
	EUH201A	
	Specific concentration limit: Repr. 1A; H360D: C ≥ 0.03 %	

SVHC

CAS: 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:**

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; consult doctor in case of complaints.
- **After skin contact:** Generally the product does not irritate the skin.
- **After eye contact:** Rinse opened eye for several minutes under running water.
- **After swallowing:** If symptoms persist consult doctor.

- **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.



Safety data sheet according to Regulation (EC) No 1907/2006, Article 31

Printing date 12.11.2025

Version number 6.2 (replaces version 6.1)

Revision: 12.11.2025

Trade name: Loetdraht HF32 Sn63Pb37
Loetdraht HF32 Sn60Pb40
Loetdraht HF32 Pb50Sn50
Loetdraht HF32 Pb60Sn40

(Contd. of page 2)

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**
During heating or in case of fire poisonous gases are produced.
- **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**
Ensure adequate ventilation
Wear protective clothing.
- **6.2 Environmental precautions:**
Do not allow product to reach sewage system or any water course.
Inform respective authorities in case of seepage into water course or sewage system.
Do not allow to enter sewers/ surface or ground water.
- **6.3 Methods and material for containment and cleaning up:**
Dispose contaminated material as waste according to section 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**
Ensure good ventilation/exhaustion at the workplace.
Open and handle receptacle with care.
- **Information about fire - and explosion protection:** Keep respiratory protective device available.
- **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

- **8.1 Control parameters**
- **Ingredients with limit values that require monitoring at the workplace:**
CAS: 7439-92-1 Lead
BOELV Long-term value: 0.15 mg/m³
as Pb
- **Additional information:** The lists valid during the making were used as basis.
- **8.2 Exposure controls**
- **Appropriate engineering controls** No further data; see section 7.

(Contd. on page 4)
EU



Safety data sheet according to Regulation (EC) No 1907/2006, Article 31

Printing date 12.11.2025

Version number 6.2 (replaces version 6.1)

Revision: 12.11.2025

Trade name: Loetdraht HF32 Sn63Pb37
Loetdraht HF32 Sn60Pb40
Loetdraht HF32 Pb50Sn50
Loetdraht HF32 Pb60Sn40

(Contd. of page 3)

- **Individual protection measures, such as personal protective equipment**

- **General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.
Wash hands before breaks and at the end of work.
Store protective clothing separately.

- **Respiratory protection:**

Not necessary if room is well-ventilated.
Use suitable respiratory protective device in case of insufficient ventilation.
Filter A/P2

- **Hand protection**



Protective gloves

Rubber gloves

Synthetic rubber gloves

To avoid skin problems reduce the wearing of gloves to the required minimum.

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

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

- **Material of gloves**

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 can not be calculated in advance and has therefore to be checked prior to the application.

- **Penetration time of glove material**

The determined penetration times according to EN 16523-1:2015 are not performed under practical conditions. Therefore a maximum wearing time, which corresponds to 50% of the penetration time, is recommended.

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

- **Eye/face protection** Safety glasses

SECTION 9: Physical and chemical properties

- **9.1 Information on basic physical and chemical properties**

- **General Information**

- **Physical state**

Solid

- **Colour:**

Grey

- **Odour:**

Odourless

- **Odour threshold:**

Not determined.

- **Melting point/freezing point:**

Undetermined.

- **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.

- **Decomposition temperature:**

Not determined.

- **pH**

Not applicable.

- **Viscosity:**

- **Kinematic viscosity**

Not applicable.

- **Dynamic:**

Not applicable.

(Contd. on page 5)
EU



Safety data sheet according to Regulation (EC) No 1907/2006, Article 31

Printing date 12.11.2025

Version number 6.2 (replaces version 6.1)

Revision: 12.11.2025

Trade name: Loetdraht HF32 Sn63Pb37
Loetdraht HF32 Sn60Pb40
Loetdraht HF32 Pb50Sn50
Loetdraht HF32 Pb60Sn40

(Contd. of page 4)

· Solubility	
· water:	Insoluble.
· Partition coefficient n-octanol/water (log value)	Not determined.
· Vapour pressure:	Not applicable.
· Density and/or relative density	
· Density:	Not determined.
· Relative density	Not determined.
· Vapour density	Not applicable.
· Particle characteristics	See section 3.
· 9.2 Other information	
· Appearance:	
· Form:	Wire
· Important information on protection of health and environment, and on safety.	
· Ignition temperature:	Product is not selfigniting.
· Explosive properties:	Product does not present an explosion hazard.
· Solvent content:	
· 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 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.
- 10.6 Hazardous decomposition products: No dangerous decomposition products known.



Safety data sheet according to Regulation (EC) No 1907/2006, Article 31

Printing date 12.11.2025

Version number 6.2 (replaces version 6.1)

Revision: 12.11.2025

Trade name: Loetdraht HF32 Sn63Pb37
Loetdraht HF32 Sn60Pb40
Loetdraht HF32 Pb50Sn50
Loetdraht HF32 Pb60Sn40

(Contd. of page 5)

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.
- **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.
- **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.
- **STOT-repeated exposure**
Causes damage to the central nervous system, the kidneys and the blood 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**
- **Remark:** Very toxic for fish
- **Additional ecological information:**
- **General notes:**
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.
Also poisonous for fish and plankton in water bodies.
Very toxic for aquatic organisms

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**
HP5 Specific Target Organ Toxicity (STOT)/Aspiration Toxicity
HP10 Toxic for reproduction
HP14 Ecotoxic

(Contd. on page 7)
EU



Safety data sheet according to Regulation (EC) No 1907/2006, Article 31

Printing date 12.11.2025

Version number 6.2 (replaces version 6.1)

Revision: 12.11.2025

Trade name: Loetdraht HF32 Sn63Pb37
Loetdraht HF32 Sn60Pb40
Loetdraht HF32 Pb50Sn50
Loetdraht HF32 Pb60Sn40

(Contd. of page 6)

- **Uncleaned packaging:**
- **Recommendation:** Packagings that may not be cleansed are to be disposed of in the same manner as the product.

SECTION 14: Transport information

- **14.1 UN number or ID number**
· ADR, IMDG, IATA not regulated
- **14.2 UN proper shipping name**
· ADR, IMDG, IATA not regulated
- **14.3 Transport hazard class(es)**
· ADR, ADN, IMDG, IATA
· Class not regulated
- **14.4 Packing group**
· ADR, IMDG, IATA not regulated
- **14.5 Environmental hazards:** Not applicable.
- **14.6 Special precautions for user** Not applicable.
- **14.7 Maritime transport in bulk according to IMO instruments** Not applicable.
- **UN "Model Regulation":** not regulated

SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Labelling according to Regulation (EC) No 1272/2008**
The product is classified and labelled according to the CLP regulation.
- **Hazard pictograms**



GHS08 GHS09

- **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.
H372 Causes damage to the central nervous system, the kidneys and the blood through prolonged or repeated exposure.
H410 Very toxic to aquatic life with long lasting effects.
- **Precautionary statements**
P201 Obtain special instructions before use.
P260 Do not breathe dust/fume/gas/mist/vapours/spray.
P270 Do not eat, drink or smoke when using this product.
P273 Avoid release to the environment.
P280 Wear protective clothing / eye protection.
P280 Wear protective gloves.
P308+P313 IF exposed or concerned: Get medical advice/attention.

(Contd. on page 8)
EU



Safety data sheet according to Regulation (EC) No 1907/2006, Article 31

Printing date 12.11.2025

Version number 6.2 (replaces version 6.1)

Revision: 12.11.2025

Trade name: Loetdraht HF32 Sn63Pb37
Loetdraht HF32 Sn60Pb40
Loetdraht HF32 Pb50Sn50
Loetdraht HF32 Pb60Sn40

(Contd. of page 7)

P314 Get medical advice/attention if you feel unwell.
P391 Collect spillage.
P405 Store locked up.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

- **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: 30, 63, 72

- **Regulation (EU) No 649/2012**

CAS: 7439-92-1 Lead

Annex I Part 1

- **DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II**

CAS: 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:**

- **Other regulations, limitations and prohibitive regulations**

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

CAS: 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.

- **Relevant phrases**

H360D May damage the unborn child.
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.
EUH201A Warning! Contains lead.

- **Department issuing SDS:** Product Safety Department

- **Contact:** Hr. Dörr

- **Date of previous version:** 24.09.2024

- **Version number of previous version:** 6.1

(Contd. on page 9)

EU



Safety data sheet according to Regulation (EC) No 1907/2006, Article 31

Printing date 12.11.2025

Version number 6.2 (replaces version 6.1)

Revision: 12.11.2025

Trade name: Loetdraht HF32 Sn63Pb37
Loetdraht HF32 Sn60Pb40
Loetdraht HF32 Pb50Sn50
Loetdraht HF32 Pb60Sn40

(Contd. of page 8)

· Abbreviations and acronyms:

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

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

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

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

EU