	<b>Safety Data Sheet</b> according to EC Directive No. 1907/2006	Printing date : 02/09/2020 Reviewed: 01/09/2020
	Feinhütte Halsbrücke GmbH	<b>Solder wire Sn99,3Cu0,7          with flux core 1122 / ROM1</b>

## 1 Designation / preparation of the substance and firm name

### Specification of the product

Trade name: Solder wire Sn99,3Cu0,7 (ISO 9453)  
 with flux core 1122 / ROM1 (F-SW26) (ISO 9454)

**REACH registration:** Tin 01-2119486474-28-XXXX

**Use of the substance / preparation:** Intermediate alloy

### Manufacturer / Supplier:

Feinhütte Halsbrücke GmbH Phone: +49 (0) 3 731 / 29 51 – 00 Fax: ... – 05  
 Krummenhennersdorfer Str. 2 E-Mail: [mail@feinhuetten.de](mailto:mail@feinhuetten.de)  
 DE – 09633 Halsbrücke Internet: [www.feinhuetten.de](http://www.feinhuetten.de)

**E-mail address of the qualified person:** [r.plebst@feinhuetten.de](mailto:r.plebst@feinhuetten.de)

### Emergency telephone number:

Poison Information Munich: Phone +49 (0) 89 19240, E-Mail: [tox@Lrz.tum.de](mailto:tox@Lrz.tum.de)

## 2 Possible hazards

### 2.1 Classification of the substance or mixture

#### Classification according to (EC) Regulation No. 1272/2008 (CLP / GHS Regulation)

Skin sensitization, cat. 1

### 2.2 Classification elements

#### Classification according to (EC) Regulation No. 1272/2008 (CLP / GHS Regulation)



GHS 07

### Signal word

Warning

### Supplemental labelling elements

"For business users only"

### Hazard statements

H317 May cause an allergic skin reaction.

### Safety instructions

P280 Wear protective gloves

### 2.3 Other hazards

Soldering and smelting processes can produce toxic smokes and fumes.

### 3 Composition / information on ingredients

#### Chemical characterization


Alloy of copper and tin,

contains flux core up to 3.5% (natural rosins, halogenated activated).

#### Ingredients

Content (in %)	Substance	EINECS no.	CAS -No.
0,5 – 0,9	copper	231-159-6	7440-50-8
remainder	tin	231-141-8	7440-31-5
(< 3,5%)	rosin	232-475-7	8050-09-7

#### Hazardous substance labelling of ingredients (EU Regulation (EC) No. 1272/2008)

Substance	Symbols	H phrases	Routes of exposure, target organ, concrete impact
copper	-	-	-
tin	-	-	-
rosin	GHS07		317 Respiratory or skin irritation

### 4 First Aid Measures

#### After skin contact:

In case of burns immediately cool the burnt area for several minutes with cold running water. In case of serious burns cover the wound with sterile material. Seek medical advice resp. medical attendance.

#### After eye contact:

Wash the eye with water for several minutes while holding up the lid. Remove any existing contact lenses if possible. Continue rinsing.

Seek medical advice resp. medical attendance.

#### After swallowing:


Seek medical advice resp. medical attendance.

#### After inhalation:

Ventilate or suck out the working areas sufficiently during soldering. The regulations of the institutions for statutory accident insurance and prevention, the rules of work safety and hygiene must be observed. Remove affected person to fresh air. In cases of sickness seek medical advice resp. medical attendance.

#### Informations for the doctor:

none

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## 5 Fire-fighting measures

### Suitable extinguishing agents

Water spray, dry sand

### Unsuitable extinguishing agents

Full water jet, foam

### Special hazards caused by the substance or mixture itself, its products of combustion or resulting gases

Substance itself is not flammable. At the source of the fire, harmful vapors and fumes may be produced. No warning of odours!

### Special protective equipment for fire-fighters

Wear self-contained breathing apparatus. Wear a protective suit.

### Additional information

Prevent extinguishing water from penetrating into the surface water, ground water and soil!

## 6 Measures in case of unintentional release

### Personal safety precautions

Provide fresh air in closed rooms. Avoid dust formation. Do not breathe gas / fumes / vapour. Remove all uninvolved persons to windward (against the wind). Avoid contact with skin, eyes and clothing.

### Environmental safety precautions

Make sure that the material cannot leak into the sewerage system/surface water/ground water. If penetrating into water, soil or drainage systems notify the respective authorities accordingly.

### Methods of cleaning / handling

Pick up by mechanical means (in as dry a state as possible). Conduct to suitable containers for recycling or disposal. Handle the collected material in accordance with the chapter on "Disposal".

### Reference to other sections

For information on personal protective equipment refer to Section 8. For information concerning disposal refer to Section 13.

## 7 Handling and storage

### Handling

#### Precautions for safe handling

Ensure good ventilation, if necessary exhaustion, at the workplace. Do not breathe flue gases. The regulations of the employers' liability insurance association must be observed in addition to hygiene regulations.

#### Protection against fire and explosion

No special measures required. The product is not combustible.

### Storage

#### Requirements as to store rooms and receptacles

No special requirements.

#### Informations on storage with other products

Do not store together with:

- food, drink and animal feedingstuffs,
- compressed or liquefied gases or gases dissolved under pressure,

- substances liable to spontaneous combustion,
- substances which, in contact with water, emit flammable gases,
- other combustible or combustion supporting material,
- flammable solids

**Further information on storage conditions**

No special measures required.

**Specific applications**

Solder for soldering

**VCI storage category**

13 - Non-combustible solids in non-hazardous packaging.

**8 Limitation and monitoring of exposure / personal protective equipment**

**Exposure limit values**

**For Germany**

The Technical Rule for Hazardous Substances (TRGS 900) stipulates a workplace exposure limit value applicable to inorganic tin (IV) compounds in the inhalable fraction of 2 mg/m<sup>3</sup>.

In the current version of TRGS 900 (updated in January 2018) no workplace exposure limit value has been determined in respect of copper and its inorganic compounds.

**Relevant DNEL / DMEL / PNEC and other threshold**

**Values relevant to human health**

Endpoint	Threshold value	Protection objective, route of exposure	Use in	exposuretime
Copper 7440-50-8				
DNEL	1 mg/m <sup>3</sup>	Human, inhaled	Employees (industry)	acute - local effects
DNEL	273 mg/kg	Human, dermal	Employees (industry)	acute - systemic effects
DNEL	20 mg / m <sup>3</sup>	Human, inhaled	Employees (industry)	acute - systemic effects
DNEL	1 mg / m <sup>3</sup>	Human, inhaled	Employees (industry)	chronic - local effects
DNEL	137 mg/kg	Human, dermal	Employees (industry)	chronic - systemic effects

**Values relevant to the environment**

Endpoint	Threshold value	Environmental compartment	Exposure time
Copper 7440-50-8			
PNEC	7.8 µg/l	fresh water	short term (one time)
PNEC	5.2 µg/l	seawater	short term (one time)
PNEC	230 µg/l	Wastewater treatment plant (STP)	short term (one time)
PNEC	87 mg/kg	seawater sediment	short term (one time)
PNEC	676 mg/kg	seawater sediment	short term (one time)
PNEC	65 mg/kg	soil	short term (one time)

**Limitation and monitoring of exposure**

Never inhale dust, smoke or mist; refrain from eating, drinking and smoking at work; always wash your hands before break times. After finishing work it is recommendable to give the whole body a thorough cleansing

**Personal protective equipment**

Not required for normal operation.

**Respiratory protection**

When carrying out soldering work always ensure adequate ventilation. This is attainable by a local extraction system or a general exhaust-air system. Where workplace exposure limits are exceeded, suitable breathing apparatus must be worn.

**Hand protection/eye protection/body protection**

Protective gloves (recommendable, for example, are leather gloves), close-fitting safety goggles (DIN EN 166), suitable protective clothing is essential, if necessary also wear suitable breathing apparatus (observe wearing-life limits!).

**General protective and hygiene measures**

Keep well away from foodstuffs and fodder. Never eat or drink at work and refrain from smoking! Always wash your hands before break times and after finishing work. Avoid contact with the eyes and skin. Never inhale dust/smoke/aerosols. Use a separate storage place for protective clothing.

**Environmental safety precautions**

See sections 6 and 7. No further measures known.

**9 Physical and chemical properties**

<b>General Information</b>	<b>solder</b>	<b>flux core</b>
Shape:	solid	pasty
Colour:	silvery	yellow wish to amber
Odour:	odourless	low
<b>Safety relevant data</b>		
Melting point/range: without	227°C	80-125°C
Boiling point/range:	n.a.	~130°C
Flash point:	n.e.	~180°C
Inflammation temperature:	n.a.	~400°C
Decomposition temperature:	n.e.	n.e.
Spontaneous inflammability:	This product is not self-igniting.	
Explosion hazard:	This product is not self-igniting.	
Solubility in water:	insoluble	insoluble
n.a. = not applicable n.e. = not estimable		

**10 Stability and reactivity**

**Conditions to be avoided**

See section 7. Further information not available. No decomposition in case of appropriate use.

**Materials to be avoided**

With nitric acid, formation of hazardous nitrous gases. Violent reaction to oxidising agents.

**Hazardous decomposition products**

Hazardous combustion products: see section 5.

## 11 Toxicological information

### Acute toxicity

Not classified as acutely toxic

### Irritation/corrosion to the skin

Is not classified as corrosive / irritant.

### Serious eye damage / eye irritation

It should not be classified as seriously damaging to the eyes or irritating to the eyes.

### Respiratory or skin sensitization

May cause an allergic skin reaction. Sensitization possible through skin contact.

CAS.-No.	Designation		
8050-09-7	rosin		
Exposure	parameter	value	species
Oral	LD <sub>50</sub>	2.800 mg/kg	Rat ( <i>Rattus norvegicus</i> )
Oral	LD <sub>50</sub>	>1.000 - < 2.000 mg/kg	Guinea pig ( <i>Cavia aperea f. porcellus</i> )
Oral	LD <sub>50</sub>	>2.000 mg/kg	Rat ( <i>Rattus norvegicus</i> )

### Summary of the assessment of CMR properties

Does not qualify as germ cell mutagen, carcinogen or reproductive toxicity.

### Specific target organ toxicity - single exposure

Is not classified as specific target organ toxicant (single exposure).

### Specific target organ toxicity - repeated exposure

Is not classified as specific target organ toxicant (repeated exposure).

### Aspiration hazard

Is not classified as aspiration hazard.

## 12 Ecological information

### Toxicity

Council Directive 1272/2008/EC: Is not classified as hazardous to the aquatic environment.

### Process of degradability

The methods for determining the biodegradability are not applicable to inorganic substances.

### Bioaccumulation potential


No data available

### Mobility in soil

No data available

### Results of PBT and vPvB assessment

No data available

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**Other adverse effects**

Not hazardous to water. (AwSV)

### 13 Disposal considerations

**Product**

A waste code number in pursuance of the European Waste Catalogue (AVV) needs to be allocated in consultation with the regional waste-disposal company or authority.

Disposal should take place in accordance with the respective national and regional regulations. Observe the obligation to furnish evidence! The unused product as well as residual quantities can be recycled in lead-smelting works (specialised waste-disposal companies).

**Contaminated packaging materials**

Disposal in accordance with official regulations Empty containers with harmful residues are to be treated as hazardous waste and disposed of accordingly. Always consult with the special waste disposal company.

Proposal for labelling: Waste code number 15 01 10 \* (packaging containing residues of dangerous substances or contaminated by dangerous substances)

**Cleaned packaging materials**

Non-contaminated and cleaned packaging materials can be used for recycling purposes

### 14 Transport information

**Transport ADR/RID/ADN**

The product is not subject to ADR / RID / ADN regulations.

**Transport IMDG**

The product is not subject to the IMDG regulations.

**Transport ICAO-TI / IATA**

The product is not subject to ICAO-TI / IATA regulations.

**Further information**

No information available

**Environmental hazards**


For information on environmental hazards, where relevant, see above.

**Special precautions for users**

No information available

**Transportation in bulk in pursuance of Annex II to the MARPOL Convention and in accordance with the IBC Code**

Not applicable

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## 15 Information on legislation

### EU regulations

#### **Council Regulation (EC) No. 1907/2006 (REACH) Annex XIV (list of substances requiring authorisation)**

According to the available data and/or information provided by the sub-suppliers, the product contains no substance(s) classified as requiring authorisation pursuant to the REACH Regulation (EC) 1907/2006 Annex XIV.

#### **REACH Candidate List of substances of very high concern (SVHC) for the authorisation procedure**

According to the available data and/or information provided by the sub-suppliers, the product contains no substance(s) entering into question for inclusion in Annex XIV (list of substances subject to authorisation) in pursuance of Article 59 of the REACH Regulation (EC) 1907/2006.

#### **Council Directive 2012/18/EU for the control of major accident-hazards involving hazardous substances**

The product is not subject to the requirements of Annex I, Part 1 and 2

#### **Other regulations**

The national regulations are applicable to the use of this product.

### National regulations

#### **Water hazard classification**

Class WGK 0 (nwg)

Source Classification according to AwSV

#### **Classification according to Vbf**

not required

## 16 Other information

Data sources used to create the data sheet:

Regulation (EC) No. 1907/2006 (REACH), 1272/2008 (CLP / GHS Regulation), in the respective applicable version. EC Directives 2000/39/EC, 2006/15/EC and 2009/161/EU.

National workplace exposure limit values lists of the respective countries in the relevant valid version.


Transport regulations in accordance with ADR, RID, IMDG and IATA in the relevant valid version.

Data sources that have been used for determining physical, toxicological and eco-toxicological data are quoted directly in the respective sections.

#### **Changes made since the last version**

Changes to the text are identified as such in the margin of the page



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**Data sheet issuing department**

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The information given in this Safety Data Sheet reflects the latest knowledge ref. to our product. The Safety Data Sheet intends to describe the product with reference to its safety requirements. This does not imply a warranty that our product is of a specific quality in terms of liability or guarantee provisions and therefore, the information is without obligation.