

# Safety data sheet

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

Printing date 23.08.2018

Version number 4

Revision: 23.08.2018

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

#### 1.1 Product identifier

Trade name: **Sondermessinghartlot**  
**Special brass hard solder**  
**Cu 681, B-Cu59ZnSn(Ni)(Mn)(Si) (L-CuZn39Sn)**



#### 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 *Hard solder*

#### 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

### 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:

Contains nickel. May produce an allergic reaction.

#### 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: 7440-50-8 EINECS: 231-159-6 Reg.nr.: 01-2119480154-42	copper	substance with a Community workplace exposure limit	56.0-60.0%
CAS: 7440-66-6 EINECS: 231-175-3 Reg.nr.: 01-2119467174-37	zinc	substance with a Community workplace exposure limit	38.8-44.85%
CAS: 7440-02-0 EINECS: 231-111-4 Reg.nr.: 01-2119438727-29	nickel	⚠ Carc. 2, H351; STOT RE 1, H372; ⚠ Skin Sens. 1, H317	<1%

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: No special measures required.

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

**After skin contact:**

Generally the product does not irritate the skin.

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

Do not pull solidified product off the skin.

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

**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.

## SECTION 5: Firefighting measures

**5.1 Extinguishing media**

**Suitable extinguishing agents:**

CO<sub>2</sub>, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

**5.2 Special hazards arising from the substance or mixture** No further relevant information available.

**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** Not required.

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

**6.3 Methods and material for containment and cleaning up:** 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** 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:** 13

**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:**

**7440-50-8 copper**

MAK (Germany) Long-term value: 0.01 A mg/m<sup>3</sup>  
als Cu

**7440-66-6 zinc**

MAK (Germany) Long-term value: 0.1 A \* 2 E \*\* mg/m<sup>3</sup>  
\*alveolengängig; \*\*einateilbar

**7440-31-5 tin**

MAK (Germany) vgl. Abschn. IIb

**Regulatory information** MAK (Germany): MAK- und BAT-Liste

**recommended monitoring procedures in accordance with 453/2010/EU no. 8.1.2:**

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

7440-66-6 zinc: NIOSH 7300, 7301, 7303 (E), OSHA ID 121 (E)

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

## 8.2 Exposure controls

### Appropriate engineering controls:

*Ensure adequate ventilation.*

*Removing the fumes by suitable suction devices.*

### Personal protective equipment:

#### General protective and hygienic measures:

*The usual precautionary measures are to be adhered to when handling chemicals.*

#### 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*

*Leather gloves*

#### 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 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.*

**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:

<b>Form:</b>	<i>Solid</i>
<b>Colour:</b>	<i>brass coloured</i>
<b>Odour:</b>	<i>Odourless</i>
<b>Odour threshold:</b>	<i>Not determined.</i>

**pH-value:** *Not applicable.*

##### Change in condition

<b>Melting point/freezing point:</b>	<i>870-890 °C</i>
<b>Initial boiling point and boiling range:</b>	<i>Undetermined.</i>

**Flash point:** *Not applicable.*

**Flammability (solid, gas):** *Not determined.*

**Decomposition temperature:** *Not determined.*

**Auto-ignition temperature:** *Product is not selfigniting.*

**Explosive properties:** *Product does not present an explosion hazard.*

##### Explosion limits:

<b>Lower:</b>	<i>Not determined.</i>
<b>Upper:</b>	<i>Not determined.</i>

**Vapour pressure:** *Not applicable.*

**Density at 20 °C:** *8.4 g/cm<sup>3</sup>*

**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:

<b>Dynamic:</b>	<i>Not applicable.</i>
<b>Kinematic:</b>	<i>Not applicable.</i>

##### Solvent content:

<b>Organic solvents:</b>	<i>0.0 %</i>
<b>VOC (EC)</b>	<i>0.00 %</i>

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**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 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.

### 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 (carcinogenicity, 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:**

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

**Packaged for sale:**

15 01 02: plastic packaging

**overpack:**

15 01 01: paper and cardboard packaging

**Uncleaned packaging:** void.**Recommendation:** Disposal must be made according to official regulations.

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### SECTION 14: Transport information

14.1 UN-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 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:

Information about limitation of use: *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:** 08/04/2016: Anpassung to Regulations 453/2010/EC, 830/2015/EU, 2012/18/EU

**Relevant phrases**

H317 *May cause an allergic skin reaction.*

H351 *Suspected of causing cancer.*

H372 *Causes damage to organs through prolonged or repeated exposure.*

**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)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Skin Sens. 1: Skin sensitisation – Category 1

Carc. 2: Carcinogenicity – Category 2

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

**Safety data sheet SD3153**

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