


1 Identification of the substance/preparation and of the company/undertaking· **Product details**· **Trade name:** Schmucklote585/-hart, 585/-weich, 750/-mittel, 750/-weich
800/-hart, 830/-hart· **Application of the substance / the preparation** *Brazing alloy*· **Manufacturer/Supplier:***Heraeus Metallhandelsgesellschaft mbH
Heraeusstr. 12-14,
D-63450 Hanau
Deutschland/ Germany*· **Further information obtainable from:** *Stephanie Kunesch Tel: +49-(0)6181-359553***2 Composition/information on ingredients**· **Chemical characterization**· **Description:***Alloy out of the metals
Ag, Au, Cu, In, Ni, Zn*· **Dangerous components:**

CAS: 7440-02-0

*nickel*Carc. Cat. 3;  Xn; R 40-43 ≤15%

EINECS: 231-111-4

· **Additional information:** *For the wording of the listed risk phrases refer to section 16.***3 Hazards identification**· **Hazard description:***Xi Irritant*· **Information concerning particular hazards for human and environment:***The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.**R 43 May cause sensitisation by skin contact.*· **Classification system:***The classification is according to the latest editions of the EU-lists, and extended by company and literature data.***4 First aid measures**· **After inhalation:** *Supply fresh air and to be sure call for a doctor.*· **After skin contact:** *Immediately wash with water and soap and rinse thoroughly.*· **After eye contact:***Fine sized material in the eye rinse immediately with plenty of water (15 minutes), also under the eyelids.
Seek medical treatment.*· **After swallowing:***Rinse mouth with water after swallowing of fine sized material.
Seek immediate medical advice.***5 Fire-fighting measures**· **Suitable extinguishing agents:** *Special powder for metal fires. Do not use water.*

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- **Protective equipment:**
Wear self-contained respiratory protective device.
Wear fully protective suit.

6 Accidental release measures

- **Person-related safety precautions:**
Wear protective equipment. Keep unprotected persons away.
Avoid contact with substance.
Use respiratory protective device against the effects of fumes/dust/aerosol.
Avoid formation of dust.
- **Measures for environmental protection:**
Do not allow to enter sewers/ surface or ground water.
Do not allow to penetrate the ground/soil.
- **Measures for cleaning/collecting:** Dispose contaminated material as waste according to item 13.

7 Handling and storage

- **Handling:**
- **Information for safe handling:**
Wear protective equipment. Keep unprotected persons away.
Prevent formation of dust.
Use respiratory protective device against the effects of fumes/dust/aerosol.
Extractors are required on all machines used for thermal processing or splinter removal processes.
- **Information about fire - and explosion protection:** The product is not combustible.
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** Store in dry conditions.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** None.

8 Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.

· **Ingredients with limit values that require monitoring at the workplace:**

7440-22-4 silver	
WEL	Long-term value: 0.1 mg/m ³
7440-50-8 copper	
WEL	Short-term value: 2** mg/m ³ Long-term value: 0.2* 1** mg/m ³
7440-02-0 nickel	
WEL	Long-term value: 0.5 mg/m ³

- **Additional information:**
The lists valid during the making were used as basis.
Nickel and nickel oxide can be generated during thermal processes.
Nickel oxide may cause cancer by inhalation (carcinogenic Cat. 2). Nickel shows limited evidence of a carcinogenic effect (Cat. 3).
Vapour, fume, dust liberated by soldering, melting or grinding must be directly exhausted at the place of formation.
- **Personal protective equipment:**
- **General protective and hygienic measures:**
Do not inhale dust / smoke / mist.
Avoid contact with the skin.
Be sure to clean skin thoroughly after work and before breaks.
- **Respiratory protection:**
If the exhausting device is not sufficient use respiratory protection filter.
half mask

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Filter P3

· Protection of hands:



Protective gloves

· **Material of gloves** Nitrile rubber, NBR

· **Eye protection:** Safety glasses

· Body protection:

Protective work clothing

If dust is generated use dustproof protective work clothing.

9 Physical and chemical properties

· General Information

Form: Solid
Colour: metallic
Odour: Odourless

· Change in condition

Melting point/Melting range: 720-1050°C
Boiling point/Boiling range: Undetermined.

· **Flash point:** Not applicable.

· **Flammability (solid, gaseous):** Product is not flammable.

· **Self-igniting:** Product is not self igniting.

· **Danger of explosion:** Product does not present an explosion hazard.

· **Density at 20°C:** 10.5-18.2 g/cm³

· **Solubility in / Miscibility with water:** Insoluble.

· **pH-value:** Not applicable.

· Solvent content:

Organic solvents: 0.0 %

· **Solids content:** 100.0 %

10 Stability and reactivity

· Materials to be avoided:

Heavy heating.

The liberation of nickel and the formation of nickel oxide excesses with rising temperature of soldering.

· **Dangerous reactions** No dangerous reactions known.

· Dangerous decomposition products:

No dangerous decomposition products known.
nickel, nickel oxide

11 Toxicological information

· Acute toxicity:

· LD/LC50 values relevant for classification:

7440-22-4 silver

Oral	LD50	>10000 mg/kg (mouse)
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· Primary irritant effect:

· on the skin: No data available.

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- **on the eye:** No data available.
- **Sensitization:** Sensitization possible through skin contact.
- **Additional toxicological information:** see section 8

12 Ecological information

- **Ecotoxicological effects:**
- **Remark:** No data available.
- **General notes:** Avoid transfer into the environment.

13 Disposal considerations

- **Product:**
- **Recommendation**
Product or residue of product should be recycled because of precious metal content (national regulations must be observed). Material can be returned to supplier or other recycling companies.
If residues of products are classified as waste from administrative bodies or recycling of precious metal is not intended use the legal requirements to assign the European Waste Code (depending on branche of industry and industrial process).
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

- **Land transport ADR/RID (cross-border)**
- **ADR/RID class:** -
- **Maritime transport IMDG:**
- **IMDG Class:** -
- **Marine pollutant:** No
- **Air transport ICAO-TI and IATA-DGR:**
- **ICAO/IATA Class:** -

15 Regulatory information

- **Labelling according to EU guidelines:**
The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.
- **Code letter and hazard designation of product:**
Xi Irritant
- **Hazard-determining components of labelling:**
nickel
- **Risk phrases:**
43 May cause sensitisation by skin contact.
- **Safety phrases:**
22 Do not breathe dust.
36/37 Wear suitable protective clothing and gloves.
- **National regulations:**
- **Information about limitation of use:**
Employment restrictions concerning juveniles must be observed.
Employment restrictions concerning pregnant and lactating women must be observed.

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 R-phrases

40 Limited evidence of a carcinogenic effect.

43 May cause sensitisation by skin contact.

· Department issuing MSDS: HH-SUS