

1 Identification of the substance/preparation and of the company/undertaking· **Product details**· **Trade name:** Schmucklote

333/-gelb hart, 333/-gelb weich,
585/-gelb hart, 585/-gelb mittel, 585/-gelb weich, 585/-rot weich,
750/-gelb hart, 750/-gelb mittel, 750/-gelb weich,
750/-rot hart, 750/-rot mittel

· **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, Cd, Cu, Pd, Zn*

· **Dangerous components:**

CAS: 7440-43-9	cadmium (non-pyrophoric)	≤ 20%
EINECS: 231-152-8	Carc. Cat. 2, Muta. Cat. 3, Repr. Cat. 3;  T+,  N; R 45-26-48/23/25-62-68-50/53-63	

· **Additional information:** *For the wording of the listed risk phrases refer to section 16.***3 Hazards identification**· **Hazard description:**

Bulky material is not a hazardous substance concerning to directive 67/548/EEC or 1999/45/EC.

· **Information concerning particular hazards for human and environment:**

Warning! Contains cadmium. Dangerous fumes are formed during use. See information supplied by the manufacturer. Comply with the safety instructions.

· **Additional information:**

Dangerous substances may be generated by special processes. These hazards will be described in section 8.

4 First aid measures· **General information:** *In case of accident or if you feel unwell, seek medical advice immediately.*· **After inhalation:**

*After inhalation of dust or powder seek medical advice.
 Supply fresh air.*

· **After skin contact:**

*Fine sized material wash off with plenty of water.
 If skin irritation continues, consult a doctor.*

· **After eye contact:**

*Fine sized material in the eye rinse immediately with plenty of water (15 minutes), also under the eyelids.
 Seek immediate medical advice.*

· **After swallowing:**

*Rinse mouth with water after swallowing of fine sized material.
 Call a doctor immediately.*

5 Fire-fighting measures

- **Suitable extinguishing agents:** Special powder for metal fires. Do not use water.
- **Special hazards caused by the substance, its products of combustion or resulting gases:**
cadmium, cadmium oxide
- **Protective equipment:**
Wear self-contained respiratory protective device.
Wear fully protective suit.

6 Accidental release measures

- **Person-related safety precautions:**
Ensure adequate ventilation
Wear protective equipment. Keep unprotected persons away.
- **Measures for environmental protection:**
Do not allow product to reach sewage system or any water course.
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:**
Ensure adequate ventilation.
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.
Air of exhaustion lead not back to the working room.
- **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
7440-43-9 cadmium (non-pyrophoric)	
WEL	Short-term value: ,qM mg/m ³ , ,äM ppm Long-term value: L0e mg/m ³ , ä,J ppm

- **Additional information:**
Thermal processes can liberate cadmium and cadmium oxide.
This materials are very toxic by inhalation and may also cause serious damage to health by prolonged exposure through inhalation and if swallowed.
Cadmium and cadmium oxide may cause cancer (Cat. 2). There is also a possible risk of harm to the unborn child and a possible risk of impaired fertility (reproduction toxicity Cat.3).
Vapour, fume, dust liberated by soldering, melting or grinding must be directly exhausted at the place of formation.

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- **Personal protective equipment:**
- **General protective and hygienic measures:**
Do not eat, drink, smoke or sniff while working.
Keep away from foodstuffs, beverages and feed.
Be sure to clean skin thoroughly after work and before breaks.
Store protective clothing separately.
- **Respiratory protection:**
If the exhausting device is not sufficient use respiratory protection filter.
half mask
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: Yellow
Odour: Odourless

· **Change in condition**

Melting point/Melting range: 620-1160°C
Boiling point/Boiling range: Undetermined.

· **Flash point:** Not applicable.

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

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

· **Density at 20°C:** 10.9-16.0 g/cm³

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

· **Solvent content:**
Organic solvents: 0.0 %

· **Solids content:** 100.0 %

10 Stability and reactivity

· **Materials to be avoided:**

Heavy heating.
The liberation of cadmium and the formation of cadmium oxide excesses with rising temperature of soldering.

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

· **Dangerous decomposition products:** cadmium, cadmium oxide

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11 Toxicological information· **Acute toxicity:**· **LD/LC50 values relevant for classification:****7440-22-4 silver**

Oral LD50 >10000 mg/kg (mouse)

7440-43-9 cadmium (non-pyrophoric)

Oral LD50 225 mg/kg (rat)

7440-05-3 palladium

Oral LD50 >9000 mg/kg (rat)

· **Primary irritant effect:**· **on the skin:** No irritating effects known.· **on the eye:** No data available.· **Sensitization:** No sensitizing effects known.· **Additional toxicological information:** see section 8**12 Ecological information**· **Ecotoxicological effects:**· **Remark:**

No data available.

Avoid liberation in the environment because the material contains cadmium.

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:**

Uncleaned or with product residues contaminated packing should be treated like the product itself.

Packages, which do not contain product residues, should be recycled; if there does not exist a collecting system, packages can be treated as rubbish.

14 Transport information· **Land transport ADR/RID (cross-border)**· **ADR/RID class:** -· **Maritime transport IMDG:**· **IMDG Class:** -· **Air transport ICAO-TI and IATA-DGR:**· **ICAO/IATA Class:** -**15 Regulatory information**· **Labelling according to EU guidelines:**

The product is not subject to identification regulations under EU Directives and the Ordinance on Hazardous Materials (German GefStoffV).

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· Hazard-determining components of labelling:*cadmium (non-pyrophoric)***· Special labelling of certain preparations:***Warning! Contains cadmium. Dangerous fumes are formed during use. See information supplied by the manufacturer. Comply with the safety instructions.***· National regulations:****· Information about limitation of use:***Employment restrictions concerning pregnant and lactating women must be observed.**Employment restrictions concerning juveniles 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-phrases26 *Very toxic by inhalation.*45 *May cause cancer.*48/23/25 *Toxic: danger of serious damage to health by prolonged exposure through inhalation and if swallowed.*50/53 *Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.*62 *Possible risk of impaired fertility.*63 *Possible risk of harm to the unborn child.*68 *Possible risk of irreversible effects.***· Department issuing MSDS: HH-SUS**

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