

Safety data sheet

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

Printing date 15.08.2014

Revision: 01.04.2014

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

1.1 Product identifier

Trade name: ISO-CORE "CLEAR", bleifrei (lead-free)

Sn100Ni+, Sn99Ag+,
Sn98Ag+, Sn96Ag+, Sn95Ag+
S-Sn97Ag3, S-Sn96Ag4 (Sn96,5Ag3,5),
S-Sn97Cu3, S-Sn99Cu1 (Sn99,3Cu0,7),
S-Sn96Ag3Cu1 (Sn96,5Ag3Cu0,5),
S-Sn95Ag4Cu1 (Sn95,5Ag3,8Cu0,7)



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

Brazing alloy
Soldering flux

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

Further information obtainable from:

Labor

(Mo-Do. 8:00-16:00/ Fr. 8:00-13:00)

Tel.: +49(0)208/ 8 50 35-0

e-mail: mprobst@felder.de

1.4 Emergency telephone number: *Not necessary, due to the fact that the product does not need to be labelled.*

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.

Classification according to Directive 67/548/EEC or Directive 1999/45/EC Not applicable.

Information concerning particular hazards for human and environment:

The product does not have to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

Classification system:

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

2.2 Label elements

Labelling according to EU guidelines:

Observe the general safety regulations when handling chemicals.

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

Special labelling of certain preparations:

Safety data sheet available for professional user on request.

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 characterization: Mixtures

Description: *Mixture: consisting of the following components.*

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Dangerous components:			
CAS: 7440-22-4 EINECS: 231-131-3 Reg.nr.: 01-2119555669-21	silver	substance with a Community workplace exposure limit	<5%
CAS: 7440-50-8 EINECS: 231-159-6 Reg.nr.: 01-2119480154-42	copper	substance with a Community workplace exposure limit	<5%

Additional information: For the wording of the listed risk phrases refer to section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General information:

Take affected persons out into the fresh air.

No special measures required.

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

After skin contact:

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

Do not pull solidified product off the skin.

Seek medical treatment.

After eye contact: Call a doctor immediately.

After swallowing:

Rinse out mouth and then drink plenty of water.

Seek medical treatment.

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:

CO₂, 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: No special measures required.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures Wear protective clothing.

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

6.3 Methods and material for containment and cleaning up: Allow to solidify. Pick up mechanically.

6.4 Reference to other sections

No dangerous substances are released.

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 that suitable extractors are available on processing machines

No special measures required.

Information about fire - and explosion protection: No special measures required.

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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.*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:

7440-31-5 tinMAK (Germany) | *vgl. Abschn. IIb***7440-22-4 silver**AGW (Germany) | *Long-term value: 0,1 E mg/m³
8(II); DFG, EU*IOELV (EU) | *Long-term value: 0,1 mg/m³***7440-50-8 copper**MAK (Germany) | *Long-term value: 0,01 A mg/m³
II(2); als Cu***recommended monitoring procedures in accordance with 453/2010/EU no. 8.1.2:**7440-50-8 copper: *BIA 7755 (D), NIOSH 7301(E), MétrPol Fiche 003(F), MTA/MA-025/A92(ESP)*7440-22-4 silver: *ISO 15202(F, E), BIA 8600(D), NIOSH 7301(E)*Additional information: *The lists valid during the making were used as basis.***8.2 Exposure controls****Personal protective equipment:****General protective and hygienic measures:** *Do not eat, drink, smoke or sniff while working.***Respiratory protection:** *Filter P2***Protection of hands:***Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation***Material of gloves***Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation**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:**

Form:	Solid
Colour:	Silver grey
Odour:	Characteristic
Odour threshold:	Not determined.
pH-value:	Not applicable.

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Change in condition

Melting point/Melting range:	<i>Not applicable</i>
Boiling point/Boiling range:	<i>Not applicable</i>
Flash point:	<i>Not applicable.</i>
Flammability (solid, gaseous):	<i>Not determined.</i>
Ignition temperature:	
Decomposition temperature:	<i>Not determined.</i>
Self-igniting:	<i>Product is not selfigniting.</i>
Danger of explosion:	<i>Product does not present an explosion hazard.</i>
Explosion limits:	
Lower:	<i>Not determined.</i>
Upper:	<i>Not determined.</i>
Vapour pressure:	<i>Not applicable.</i>
Density:	<i>Not applicable</i>
Relative density	<i>Not determined.</i>
Vapour density	<i>Not applicable.</i>
Evaporation rate	<i>Not applicable.</i>
Solubility in / Miscibility with water:	<i>Insoluble.</i>
Partition coefficient (n-octanol/water):	<i>Not determined.</i>
Viscosity:	
Dynamic:	<i>Not applicable.</i>
Kinematic:	<i>Not applicable.</i>
Solvent content:	
Organic solvents:	<i>0,0 %</i>
VOC (EC)	<i>0,00 %</i>
Solids content:	<i>100,0 %</i>
9.2 Other information	<i>No further relevant information available.</i>

SECTION 10: Stability and reactivity

10.1 Reactivity**10.2 Chemical stability****Thermal decomposition / conditions to be avoided:***No decomposition if used and stored according to specifications.***10.3 Possibility of hazardous reactions** *Reacts with acids, alkalis and oxidizing agents.***10.4 Conditions to avoid** *No further relevant information available.***10.5 Incompatible materials:** *No further relevant information available.***10.6 Hazardous decomposition products:** *Possible in traces.*

SECTION 11: Toxicological information

11.1 Information on toxicological effects**Acute toxicity:****Primary irritant effect:****on the skin:** *No irritant effect.***on the eye:** *No irritating effect.***Sensitization:** *No sensitizing effects known.***Additional toxicological information:***The product is not subject to classification according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version.**When used and handled according to specifications, the product does not have any harmful effects to our experience and the information provided to us.*

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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:

The product contains heavy metals. Avoid transfer into the environment. Specific preliminary treatments are necessary
 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
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Uncleaned packaging:

Recommendation: Disposal must be made according to official regulations.

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 MARPOL73/78 and the IBC Code Not applicable.

UN "Model Regulation": -

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

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.

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S-Sn95Ag4Cu1 (Sn95,5Ag3,8Cu0,7)**

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* 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.

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 Harmonized 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)

*** Data compared to the previous version altered.**

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