

Safety data sheet

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

Printing date 17.07.2017

Version number 3

Revision: 22.03.2017

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

1.1 Product identifier

Trade name: **ISO-Core "EL", bleifrei**
ISO-Core "EL" leadfree
Sn97Ag3, Sn96Ag4 (Sn96,5Ag3,5 - no. 20960620), Sn95Ag5
Sn97Cu3, S-Sn99Cu1 (Sn99,3Cu0,7),
Sn96Ag3Cu1 (Sn96,5Ag3Cu0,5),
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:

lab
 (mo-thu. 8:00 a.m. - 4:00 p.m./ fr. 8:00 a.m. - 1:00 p.m.)
 email: 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.

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 Rosin. May produce an allergic reaction.

Safety data sheet available on request.

Information concerning particular hazards for human and environment:

Rosin: Caution: exposure to this material may cause certain sensitive individuals to develop eczema and/or asthma. Sensitised persons may subsequently show asthmatic symptoms when exposed to atmospheric concentrations well below the OEL. Persons with a history of asthma, allergies or chronic or recurrent respiratory disease should not be employed in any process in which this product is used.

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: 7440-22-4	silver	substance with a Community workplace exposure limit	<5%
EINECS: 231-131-3			
Reg.nr.: 01-2119555669-21			

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CAS: 7440-50-8 EINECS: 231-159-6 Reg.nr.: 01-2119480154-42	copper	substance with a Community workplace exposure limit	<3%
CAS: 8050-09-7 EINECS: 232-475-7	Rosin	⚠ 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:

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

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

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

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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 tin	
MAK (Germany)	vgl. Abschn. IIb
7440-22-4 silver	
IOELV (EU)	Long-term value: 0.1 mg/m ³
AGW (Germany)	Long-term value: 0.1 E mg/m ³ 8(II);DFG, EU
7440-50-8 copper	
MAK (Germany)	Long-term value: 0.01 A mg/m ³ Ceiling limit: 2(II) C mg/m ³ als Cu

Regulatory information

MAK (Germany): MAK- und BAT-Liste

IOELV (EU): (EU) 2017/164

AGW (Germany): TRGS 900

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

7440-50-8 copper: BIA 7755 (D), NIOSH 7301(E), M troPol 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:

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

Material of gloves

Natural rubber, NR

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.

Recommended thickness of the material: ≥ 0.22 mm

Penetration time of glove material

Value for the permeation: Level ≤ 6

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: in cases of application: protective goggles

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:	Odourless

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Odour threshold: *Not determined.*

pH-value: *Not applicable.*

Change in condition

Melting point/freezing point: 217-221 °C

Initial boiling point and boiling range: *Undetermined.*

Flash point: *Not applicable.*

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

Ignition temperature:

Decomposition temperature: *Not determined.*

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

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

Explosion limits:

Lower: *Not determined.*

Upper: *Not determined.*

Vapour pressure: *Not applicable.*

Density: *Not determined.*

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:

Dynamic: *Not applicable.*

Kinematic: *Not applicable.*

Solvent content:

Organic solvents: 0.0 %

VOC (EC) 0.00 %

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 and stored according to specifications.

10.3 Possibility of hazardous reactions *Reacts with acids, alkalis and oxidising 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 *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.*

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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:

Avoid transfer into the environment.

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 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.

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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:

03.09.2015: adaption to regulation 453/2010/EG, 830/2015/EU, 18/2012/EU

22.03.2017: chapter 1

Relevant phrases

H317 May cause an allergic skin reaction.

Contact: Dr. M. Probst

Abbreviations and acronyms:

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

ICAO: International Civil Aviation Organisation

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

Safety data sheet SD3145

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