

Safety data sheet

according to Regulation (EC) No 1907/2006, Article 31 and 2020/878/
EU

Printing date 26.06.2025

Version number 6 (replaces version 5)

Revision: 26.06.2025

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

1.1 Product identifierTrade name: **Sn100Ni+ Refill, Sn100Ni+ High-Ge-Refill, Sn100Ni+ Refill-LowGe**UFI: *not applicable.***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***1.3 Details of the supplier of the safety data sheet****Manufacturer/Supplier:**

FELDER GMBH
Im Lipperfeld 11
D-46047 Oberhausen

Tel.: 0208/8 50 35-0

Fax.: 0208/2 60 80

<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 required as this product is not subject to labelling.*

EuPCS: PC-TEC-24

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:***EUH210 Safety data sheet available 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 Mixtures**Dangerous components:**

CAS: 7440-31-5 EINECS: 231-141-8 Reg.nr.: 01-2119486474-28	tin substance with a Community workplace exposure limit	50-100%
CAS: 7440-02-0 EINECS: 231-111-4 Index number: 028-002-00-7 Reg.nr.: 01-2119438727-29	nickel (massive) ☠ Carc. 2, H351; STOT RE 1, H372 ⚠ Skin Sens. 1, H317	<0.1%
CAS: 7440-56-4 EINECS: 231-164-3 Reg.nr.: 01-2120761271-61	germanium ☠ Repr. 2, H361; STOT RE 2, H373 Aquatic Chronic 3, H412	<0.01%

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

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SECTION 4: First aid measures

4.1 Description of first aid measures

General information: Take affected persons out into the fresh air.

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

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: Do not inhale explosion gases or combustion gases.

SECTION 6: Accidental release measures

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

6.2 Environmental precautions: No special measures required.

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 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

7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Ingredients with limit values that require monitoring at the workplace:

7440-31-5 tin

WES (Australia) Long-term value: 2 mg/m³

MAK (Germany) vgl. Abschn. IIb

OEL (Ireland) Short-term value: 0.2** mg/m³

Long-term value: 2* 0.1** mg/m³

IOELV, *metal, oxide, inorg. compds., **org. compds.

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7440-56-4 germanium

AGW (Germany)	Long-term value: 0.850 E mg/m ³ 2(II);AGS, 10
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Regulatory information

WES (Australia): Workplace exposure standards for airborne contaminants

MAK (Germany): MAK- und BAT-Liste

OEL (Ireland): 2024 CoP for the Safety, Health and Welfare at Work

AGW (Germany): TRGS 900

recommended monitoring procedures in accordance with 2020/878/EU no. 8.1.2:

7440-31-5 tin: NIOSH 7300, 7301, 7303(E), OSHA ID-121, ISO15202(E,F), MTA/MA-025/A92(ESP)

Additional information: The lists valid during the making were used as basis.**8.2 Exposure controls****Appropriate engineering controls** No further data; see section 7.**Appropriate engineering controls:**

Ensure adequate ventilation.

Removing the fumes by suitable suction devices.

Individual protection measures, such as 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 A/P2

Hand protection

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

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.

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 16523-1:2015 are not performed under practical conditions.

Therefore a maximum wearing time, which corresponds to 50% of the penetration time, is recommended.

As protection from splashes gloves made of the following materials are suitable: Nitrile rubber, NBR**Eye/face 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**

Colour:	Silver-coloured
Odour:	Odourless
Odour threshold:	Not determined.
Melting point/freezing point:	227 °C
Boiling point or initial boiling point and boiling range	2620 °C
Flammability	Product is not flammable.
Lower and upper explosion limit	
Lower:	Not determined.
Upper:	Not determined.
Flash point:	Not applicable.
Decomposition temperature:	Not determined.
pH	Not applicable.
Viscosity:	
Kinematic viscosity	Not applicable.
Dynamic:	Not applicable.
Solubility	
water:	Insoluble.
Partition coefficient n-octanol/water (log value)	Not determined.
Vapour pressure:	Not applicable.
Density and/or relative density	
Density at 20 °C:	7.3 g/cm ³
Relative density	Not determined.
Bulk density at 20 °C:	4000 kg/m ³

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Vapour density	Not applicable.
Particle characteristics	See section 3.
9.2 Other information	
Appearance:	
Form:	Solid
Important information on protection of health and environment, and on safety.	
Ignition temperature:	Not determined.
Explosive properties:	Product does not present an explosion hazard.
Solvent content:	
Organic solvents:	0.0 %
VOC (EC)	0,00 %
Solids content:	100.0 %
Change in condition	
Evaporation rate	Not applicable.
Information with regard to physical hazard classes	
Explosives	Void
Flammable gases	Void
Aerosols	Void
Oxidising gases	Void
Gases under pressure	Void
Flammable liquids	Void
Flammable solids	Void
Self-reactive substances and mixtures	Void
Pyrophoric liquids	Void
Pyrophoric solids	Void
Self-heating substances and mixtures	Void
Substances and mixtures, which emit flammable gases in contact with water	Void
Oxidising liquids	Void
Oxidising solids	Void
Organic peroxides	Void
Corrosive to metals	Void
Desensitised explosives	Void

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** 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:** No dangerous decomposition products known.

SECTION 11: Toxicological information

- 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**
- 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**
- Mixture was subjected to an investigation according to DIN 1811 - nickel permeability.
- Sample number: 2016-03780
- Result: <0.50 µg / cm² / week
- 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.***11.2 Information on other hazards****Endocrine disrupting properties***None of the ingredients is listed.***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.***12.5 Results of PBT and vPvB assessment**PBT: *Not applicable.*vPvB: *Not applicable.*12.6 Endocrine disrupting properties *For information on endocrine disrupting properties see section 11.***12.7 Other adverse effects****Additional ecological information:****General notes:***The product contains heavy metals. Avoid transfer into the environment. Specific preliminary treatments are necessary**Not hazardous for water.***SECTION 13: Disposal considerations****13.1 Waste treatment methods****Recommendation** *Contact manufacturer for recycling information.***European waste catalogue***17 04 07: mixed metals**spool:**15 01 02: plastic packaging**overpack:**15 01 01: paper and cardboard packaging***Uncleaned packaging:****Recommendation:** *Disposal must be made according to official regulations.***SECTION 14: Transport information****14.1 UN number or ID 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:*Not applicable.***14.6 Special precautions for user***Not applicable.***14.7 Maritime transport in bulk according to IMO**

instruments

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.*

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REGULATION (EU) 2019/1021 on persistent organic pollutants (POP) *None of the ingredients are included.***DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II***None of the ingredients is listed.***REGULATION (EU) 2019/1148****Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))***None of the ingredients is listed.***Annex II - REPORTABLE EXPLOSIVES PRECURSORS***None of the ingredients is listed.***Regulation (EC) No 273/2004 on drug precursors***None of the ingredients is listed.***Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors***None of the ingredients is listed.***National regulations:****Information about limitation of use:** *Employment restrictions concerning juveniles must be observed.***Waterhazard class:** *Generally not 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:**

03.12.2018: section 13

06.05.2020: section 1, 11

12.09.2022: section 3, 7, 8, 15, 16

23.01.2025: section 3

26.06.2025: section 1, 8

Information referred to in Annex I, point 1.3.4.2 of Regulation 1272/2008/EC:**Relevant phrases**H317 *May cause an allergic skin reaction.*H351 *Suspected of causing cancer.*H361 *Suspected of damaging fertility or the unborn child.*H372 *Causes damage to organs through prolonged or repeated exposure.*H373 *May cause damage to organs through prolonged or repeated exposure.*H412 *Harmful to aquatic life with long lasting effects.***Contact:** *Dr. M. Probst***Version number of previous version:** 5**Abbreviations and acronyms:**ADR: *Accord relatif au transport international 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*Repr. 2: *Reproductive toxicity – Category 2*STOT RE 1: *Specific target organ toxicity (repeated exposure) – Category 1*STOT RE 2: *Specific target organ toxicity (repeated exposure) – Category 2*Aquatic Chronic 3: *Hazardous to the aquatic environment - long-term aquatic hazard – Category 3***Safety data sheet SD3377**