

Safety data sheet

according to 1907/2006/EC, Article 31 and 2020/878/EU

Printing date 29.04.2021

Version number 5

Revision: 28.04.2021

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

1.1 Product identifier

Trade name: ISO-Cream "EL 5510", lead-free NiGe
Sn96Ag+

UFI: T6H8-J0N3-4007-7EAC

**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

Soldering flux

Brazing alloy

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:

24 hr. emergency information:

Poison emergency call Berlin

"Giftnotruf Berlin"

Tel.: 0049-30-30686 790

EuPCS: PC-TEC-24

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008



GHS05 corrosion

Eye Dam. 1 H318 Causes serious eye damage.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008

The product is classified and labelled according to the CLP regulation.

Hazard pictograms

GHS05

Signal word *Danger*

Hazard-determining components of labelling:

2-(2-hexyloxyethoxy)ethanol

Hazard statements

H318 Causes serious eye damage.

Precautionary statements

P102 Keep out of reach of children.

P280 Wear eye protection / face protection.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER/doctor.

Additional information:

Contains Rosin. May produce an allergic reaction.

(Contd. on page 2)

— EU —

Safety data sheet

according to 1907/2006/EC, Article 31 and 2020/878/EU

Printing date 29.04.2021

Version number 5

Revision: 28.04.2021

Trade name: ISO-Cream "EL 5510", lead-free NiGe
Sn96Ag+

(Contd. of page 1)

Labelling of packages where the contents do not exceed 125 ml
Hazard pictograms



GHS05

Signal word *Danger*

Hazard-determining components of labelling:

2-(2-hexyloxyethoxy)ethanol

Hazard statements

H318 Causes serious eye damage.

Precautionary statements

P102 Keep out of reach of children.

P280 Wear eye protection / face protection.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER/doctor.

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

Description: Mixture: consisting of the following components.

Dangerous components:

CAS: 112-59-4 EINECS: 203-988-3 Index number: 603-175-00-7 Reg.nr.: 01-2119945815-28	2-(2-hexyloxyethoxy)ethanol	<3%
	☞ Eye Dam. 1, H318; ☞ Acute Tox. 4, H312	
CAS: 8050-09-7 EINECS: 232-475-7 Index number: 650-015-00-7 Reg.nr.: 01-2119480418-32	Rosin	<1%
	☞ Skin Sens. 1, H317	
CAS: 7440-22-4 EINECS: 231-131-3 Reg.nr.: 01-2119555669-21	silver substance with a Community workplace exposure limit	0-<3%

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: Immediately remove any clothing soiled by the product.

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. If symptoms persist, 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.

(Contd. on page 3)

— EU —

Safety data sheet

according to 1907/2006/EC, Article 31 and 2020/878/EU

Printing date 29.04.2021

Version number 5

Revision: 28.04.2021

Trade name: ISO-Cream "EL 5510", lead-free NiGe
Sn96Ag+

(Contd. of page 2)

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing agents: CO₂, powder or water spray. Fight larger fires with water spray.

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

6.3 Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

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

No special measures required.

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:

Protect from frost.

Prevent from drying out.

Storage class: 12

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

MAK (Germany)	vgl. Abschn. IIb
---------------	------------------

8050-09-7 Rosin

MAK (Germany)	vgl. Abschn. IV
WEL (Great Britain)	Short-term value: 0.15 mg/m ³ Long-term value: 0.05 mg/m ³ Sen

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
WEL (Great Britain)	Long-term value: 0.1 mg/m ³

Regulatory information

MAK (Germany): MAK- und BAT-Liste

WEL (Great Britain): EH40/2020

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

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.

(Contd. on page 4)

EU —

Safety data sheet

according to 1907/2006/EC, Article 31 and 2020/878/EU

Printing date 29.04.2021

Version number 5

Revision: 28.04.2021

Trade name: ISO-Cream "EL 5510", lead-free NiGe
Sn96Ag+

(Contd. of page 3)

8.2 Exposure controls

Appropriate engineering controls

Ensure adequate ventilation.

Remove the fumes by means of suitable suction devices.

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

Nitrile rubber, NBR

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: ≥ 0.33 mm

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.

Value for the permeation: Level ≤ 6

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:	Grey
Odour:	Characteristic
Odour threshold:	Not determined.
Boiling point or initial boiling point and boiling range	Undetermined.
Flammability	Not applicable.
Lower and upper explosion limit	
Lower:	Not determined.
Upper:	Not determined.
Flash point:	Not applicable.
Auto-ignition temperature:	Product is not selfigniting.
Decomposition temperature:	Not determined.
pH	Not determined.
Viscosity:	
Kinematic viscosity	Not determined.
Dynamic:	Not determined.
Solubility	
water:	Not miscible or difficult to mix.
Partition coefficient n-octanol/water (log value)	Not determined.
Vapour pressure:	Not determined.
Density and/or relative density	
Density at 20 °C:	3.8-3.9 g/cm ³
Relative density	Not determined.
Vapour density	Not determined.

9.2 Other information

Appearance:

Form: *Pasty*

Important information on protection of health and environment, and on safety.

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

(Contd. on page 5)

Safety data sheet

according to 1907/2006/EC, Article 31 and 2020/878/EU

Printing date 29.04.2021

Version number 5

Revision: 28.04.2021

Trade name: ISO-Cream "EL 5510", lead-free NiGe
Sn96Ag+

(Contd. of page 4)

Solvent content:
Organic solvents: 1.5 %
VOC (EC) 1.22 %
Change in condition
Evaporation rate Not determined.

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 No dangerous reactions known.
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.

LD/LC50 values relevant for classification:

ATE (Acute Toxicity Estimates)

Dermal	LD50	45,045 mg/kg (rabbit)
--------	------	-----------------------

Skin corrosion/irritation Based on available data, the classification criteria are not met.

Serious eye damage/irritation

Causes serious eye damage.

Respiratory or skin sensitisation Based on available data, the classification criteria are not met.

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.

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.

(Contd. on page 6)

— EU —

Safety data sheet

according to 1907/2006/EC, Article 31 and 2020/878/EU

Printing date 29.04.2021

Version number 5

Revision: 28.04.2021

Trade name: ISO-Cream "EL 5510", lead-free NiGe
Sn96Ag+

(Contd. of page 5)

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:

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.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Recommendation

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

European waste catalogue

16 03 03*: inorganic wastes containing hazardous substances

cleaned sales packaging:

15 01 01: paper and cardboard packaging

overpack:

15 01 10*: packaging containing residues of or contaminated by hazardous substances

Uncleaned packaging: 15 01 10*: packaging containing residues of or contaminated by hazardous substances

Recommendation:

Disposal must be made according to official regulations.

Non contaminated packagings may be recycled.

Recommended cleansing agents:

mechanical scratching, clean with alkaline soap solution and subsequent rinsing with ethanol or isopropanol.

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:

Marine pollutant:

No

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.

(Contd. on page 7)

— EU —

Safety data sheet

according to 1907/2006/EC, Article 31 and 2020/878/EU

Printing date 29.04.2021

Version number 5

Revision: 28.04.2021

Trade name: ISO-Cream "EL 5510", lead-free NiGe
Sn96Ag+

(Contd. of page 6)

REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3, 52b

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.

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.*

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:

12.10.2015: adaption to Regulation 453/2010/EC, 2012/18/EU

11.10.2017: adaption to Regulation 830/2015/EU

04.09.2019: section 1, 8, 13

28.04.2021: section 1, 15, 16

Information referred to in Annex I, point 1.3.4.2 of Regulation 1272/2008/EC:

Relevant phrases

H312 Harmful in contact with skin.

H317 May cause an allergic skin reaction.

H318 Causes serious eye damage.

Contact: Dr. M. Probst

Version number of previous version: 4

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)

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)

ICAO: International Civil Aviation Organisation

ICAO-TI: Technical Instructions by the "International Civil Aviation Organisation" (ICAO)

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)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Acute Tox. 4: Acute toxicity – Category 4

Eye Dam. 1: Serious eye damage/eye irritation – Category 1

Skin Sens. 1: Skin sensitisation – Category 1

Safety data sheet SD3077

— EU —