

Safety data sheet

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

Printing date 13.01.2020

Version number 5

Revision: 13.01.2020

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

1.1 Product identifier

Trade name: **Soldering grease**
Lötfett

UFI: 8MY8-K0KS-K00C-CS76

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*

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.



GHS07

Skin Irrit. 2 H315 Causes skin irritation.

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:

zinc chloride

Hazard statements

H315 Causes skin irritation.

H318 Causes serious eye damage.

Precautionary statements

P101 *If medical advice is needed, have product container or label at hand.*

P102 *Keep out of reach of children.*

P103 *Read label before use.*

P264 *Wash thoroughly after handling.*

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P280 Wear protective gloves/protective clothing/eye protection/face protection.
 P302+P352 IF ON SKIN: Wash with plenty of water.
 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/-
 P332+P313 If skin irritation occurs: Get medical advice/attention.

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



GHS05

Signal word *Danger***Hazard-determining components of labelling:***zinc chloride***Hazard statements***H318 Causes serious eye damage.***Precautionary statements**

P101 If medical advice is needed, have product container or label at hand.
 P102 Keep out of reach of children.
 P103 Read label before use.
 P280 Wear protective gloves/protective clothing/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 Chemical characterisation: Mixtures**Description:** *Mixture: consisting of the following components.***Dangerous components:**

CAS: 7646-85-7	zinc chloride	<5%
EINECS: 231-592-0	☠ Skin Corr. 1B, H314; ☠ Aquatic Acute 1, H400; Aquatic Chronic 1, H410;	
Reg.nr.: 01-2119472431-44	☠ Acute Tox. 4, H302	

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.***After inhalation:** *Supply fresh air; consult doctor in case of complaints.***After skin contact:** *If skin irritation continues, consult a doctor.***After eye contact:** *Rinse opened eye for several minutes under running water.***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.**Use fire extinguishing methods suitable to surrounding conditions.*

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5.2 Special hazards arising from the substance or mixture

In case of fire, the following can be released:

Hydrogen chloride (HCl)

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: *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 *No special precautions are necessary if used correctly.*

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.*

Storage class: 11

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:

7646-85-7 zinc chloride

MAK (Germany)	Long-term value: 0.1A* 2E** mg/m ³ *alveolengängig; **eintembar
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Regulatory information MAK (Germany): MAK- und BAT-Liste

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

7646-85-7 zinc chloride: NIOSH 7300, 7301, 7303(E) "Zinc", OSHA, ID-121(E)

Additional information: *The lists valid during the making were used as basis.*

8.2 Exposure controls

Appropriate engineering controls:

Ensure adequate ventilation.

Remove the fumes by means of suitable suction devices.

Personal protective equipment:

General protective and hygienic measures:

Do not eat, drink, smoke or sniff while working.

Wash hands before breaks and at the end of work.

Respiratory protection:

Use suitable respiratory protective device in case of insufficient ventilation.

Filter B

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

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: ≥ 0.4 mm

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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

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

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: Pasty
Colour: Light yellow
Odour: Characteristic
Odour threshold: Not determined.

pH-value (100 g/l) at 20 °C: 6

Change in condition

Melting point/freezing point: 55 °C
Initial boiling point and boiling range: Undetermined.
Flash point: 210 °C
Flammability (solid, gas): Not determined.
Decomposition temperature: Not determined.
Auto-ignition temperature: Product is not selfigniting.
Explosive properties: Product does not present an explosion hazard.

Explosion limits:

Lower: 0.6 Vol %
Upper: 6.5 Vol %

Vapour pressure at 20 °C: 23 hPa

Density at 20 °C: 1 g/cm³

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) 0.0 %
0.00 %

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 strong 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.

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SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity Based on available data, the classification criteria are not met.

LD/LC50 values relevant for classification:

7646-85-7 zinc chloride

Oral	LD50	1,100-1,260 mg/kg (rat)
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Primary irritant effect:

Skin corrosion/irritation

Causes skin irritation.

Serious eye damage/irritation

Causes serious eye damage.

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.

Aspiration hazard Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

12.1 Toxicity

Aquatic toxicity:

LC50(96h)	>100 mg/l (fish) (OECD 203)
EC(48h)	>100 mg/l (daphnia) (OECD 202)
ErC50(72h)	>100 mg/l (algae) (OECD 201)

chronic aquatic toxicity:

NOEC(fish) ≥ 100 mg/l, NOEC(daphnia) ≥ 100mg/l, NOEC(algae) ≥ 100mg/l

Study no. 1407401N-201,-301, -504L1

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:

Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water

Do not allow product to reach ground water, water course or sewage system.

Danger to drinking water if even small quantities leak into the ground.

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

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

European waste catalogue

06 03 13*: solid salts and solutions containing heavy metals

cleaned plastic can:

15 01 02: plastic packaging

cleaned metal can:

15 01 04: metallic packaging

packaging:

15 01 01: paper and cardboard packaging

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

Recommendation: Disposal must be made according to official regulations.

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Recommended cleansing agents:

Remove residues mechanically, clean the packaging with soap solution or with alcohol.

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 2 (Self-assessment): 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:

28.08.2015: Adaption to Regulation 453/2010/EC, 830/2015/EU, 2012/18/EU

10.03.2017: Chapter 8.1, 11

24.05.2017: Chapter 11, 15

13.04.2018: Chapter 13

13.01.2020: Chapter 1 UFI

Relevant phrases

H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

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)

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 - oral – Category 4

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*Skin Corr. 1B: Skin corrosion/irritation – Category 1B**Skin Irrit. 2: Skin corrosion/irritation – Category 2**Eye Dam. 1: Serious eye damage/eye irritation – Category 1**Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1**Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1***Safety data sheet SD3245**

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