



## Safety data sheet according to 1907/2006/EC, Article 31

Printing date 26.01.2023

Version number 6.3 (replaces version 6.2)

Revision: 26.01.2023

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

#### 1.1 Product identifier

Trade name: **Loetfett HA**

#### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Sector of Use SU3 Industrial uses: Uses of substances as such or in preparations at industrial sites

Technical function soldering

Application of the substance / the mixture Soldering flux

#### 1.3 Details of the supplier of the safety data sheet

##### Manufacturer/Supplier:

Stannol GmbH & Co. KG  
Haberstrasse 24  
D-42551 Velbert

+49 (0) 2051 3120 332  
sdb@stannol.de

Further information obtainable from: Product Safety Department

#### 1.4 Emergency telephone number:

8:00 am - 5:00 pm (CET) +49 (0) 2051 3120 332

National Poisons Information Service  
+44 121 507 4123

Members of the public seeking specific information on poisons should contact:  
In England and Wales: NHS 111 - dial 111  
In Scotland: NHS 24 - dial 111

### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

##### Classification according to Regulation (EC) No 1272/2008

Skin Corr. 1B H314 Causes severe skin burns and eye damage.

Eye Dam. 1 H318 Causes serious eye damage.

STOT SE 3 H335 May cause respiratory irritation.

Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.

#### 2.2 Label elements

##### Labelling according to Regulation (EC) No 1272/2008

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

##### Hazard pictograms



GHS05



GHS07



GHS09

Signal word Danger

##### Hazard-determining components of labelling:

zinc chloride

##### Hazard statements

H314 Causes severe skin burns and eye damage.

H335 May cause respiratory irritation.

H411 Toxic to aquatic life with long lasting effects.

##### Precautionary statements

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

P271 Use only outdoors or in a well-ventilated area.

P273 Avoid release to the environment.

P280 Wear protective gloves / eye protection.



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- P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.  
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].  
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 doctor.  
P391 Collect spillage.  
P403+P233 Store in a well-ventilated place. Keep container tightly closed.  
P405 Store locked up.  
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

**· 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 of substances listed below with nonhazardous additions.

**· Dangerous components:**

CAS: 7646-85-7	zinc chloride	2.5 - 15%
EINECS: 231-592-0	Skin Corr. 1B, H314 Aquatic Acute 1, H400; Aquatic Chronic 1, H410 Acute Tox. 4, H302 Specific concentration limit: STOT SE 3; H335: C ≥ 5 %	
CAS: 12125-02-9	ammonium chloride	≤ 1%
EINECS: 235-186-4	Acute Tox. 4, H302; Eye Irrit. 2, H319	

- **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:** In case of unconsciousness place patient stably in side position for transportation.
- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.
- **After swallowing:** Drink plenty of water and provide fresh air. Call for a doctor immediately.
- **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:** Use fire extinguishing methods suitable to surrounding conditions.

**· 5.2 Special hazards arising from the substance or mixture**

During heating or in case of fire poisonous gases are produced.

**· 5.3 Advice for firefighters**

- **Protective equipment:** Mouth respiratory protective device.

**SECTION 6: Accidental release measures****· 6.1 Personal precautions, protective equipment and emergency procedures**

- Ensure adequate ventilation
- Wear protective clothing.

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**· 6.2 Environmental precautions:**

- Do not allow product to reach sewage system or any water course.
- Inform respective authorities in case of seepage into water course or sewage system.
- Do not allow to enter sewers/ surface or ground water.

**· 6.3 Methods and material for containment and cleaning up:**

- Use neutralising agent.
- Dispose contaminated material as waste according to item 13.
- Ensure adequate ventilation.

**· 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**

- Thorough dedusting.
- Ensure good ventilation/exhaustion at the workplace.

**· Information about fire - and explosion protection:** Keep respiratory protective device available.**· 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:** Not required.
- Further information about storage conditions:** Keep container tightly sealed.

**· Storage class:** 8 A**· 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:****CAS: 7646-85-7 zinc chloride**

- WEL (Great Britain) Short-term value: 2 mg/m<sup>3</sup>
- Long-term value: 1 mg/m<sup>3</sup>

**CAS: 12125-02-9 ammonium chloride**

- WEL (Great Britain) Short-term value: 20 mg/m<sup>3</sup>
- Long-term value: 10 mg/m<sup>3</sup>

**· Additional information:** The lists valid during the making were used as basis.**· 8.2 Exposure controls**

- Appropriate engineering controls** No further data; see item 7.
- Individual protection measures, such as personal protective equipment**

**· General protective and hygienic measures:**

- Keep away from foodstuffs, beverages and feed.
- Immediately remove all soiled and contaminated clothing
- Wash hands before breaks and at the end of work.
- Avoid contact with the eyes.
- Avoid contact with the eyes and skin.

**· Respiratory protection:**

- Not necessary if room is well-ventilated.
- Use suitable respiratory protective device in case of insufficient ventilation.
- Filter A/P2

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### · Hand protection



Protective gloves

Rubber gloves

Synthetic rubber gloves

To avoid skin problems reduce the wearing of gloves to the required minimum.

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

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. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

### · Penetration time of glove material

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.

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

### · Eye/face protection Safety glasses

## SECTION 9: Physical and chemical properties

### · 9.1 Information on basic physical and chemical properties

#### · General Information

· Physical state	Solid
· Colour:	According to product specification
· Odour:	Characteristic
· Odour threshold:	Not determined.
· Melting point/freezing point:	Undetermined.
· Boiling point or initial boiling point and boiling range	721 °C
· Flammability	Not determined.
· 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:	Soluble.
· Partition coefficient n-octanol/water (log value)	Not determined.
· Vapour pressure:	Not applicable.
· Density and/or relative density	
· Density:	Not determined.
· Relative density	Not determined.
· Vapour density	Not applicable.

### · 9.2 Other information

· Appearance:	
· Form:	Solid

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

- **Auto-ignition temperature:** Product is not selfigniting.
- **Explosive properties:** Product does not present an explosion hazard.
- **Solvent content:**
- **Water:** 4.0 %
- **Solids content:** 96.0 %
- **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** 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:**  
**CAS: 7646-85-7 zinc chloride**  
Oral LD50 350 mg/kg (rat)
- **Skin corrosion/irritation** Causes severe skin burns and eye damage.
- **Serious eye damage/irritation** Causes serious eye damage.
- **STOT-single exposure** May cause respiratory irritation.

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- **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** The product does not contain substances with endocrine disrupting properties.
- **12.7 Other adverse effects**
- **Remark:** Toxic for fish
- **Additional ecological information:**
- **General notes:**  
Water hazard class 3 (German Regulation) (Self-assessment): extremely hazardous for water  
Do not allow product to reach ground water, water course or sewage system, even in small quantities.  
Must not reach sewage water or drainage ditch undiluted or unneutralised.  
Danger to drinking water if even extremely small quantities leak into the ground.  
Also poisonous for fish and plankton in water bodies.  
Toxic for aquatic organisms

### 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.
- **Uncleaned packaging:**
- **Recommendation:** Packagings that may not be cleansed are to be disposed of in the same manner as the product.
- **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

### SECTION 14: Transport information

- **14.1 UN number or ID number**
- **ADR, IMDG, IATA** UN3077
- **14.2 UN proper shipping name**
- **ADR** 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (ZINC CHLORIDE)
- **IMDG** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (ZINC CHLORIDE), MARINE POLLUTANT
- **IATA** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (ZINC CHLORIDE)

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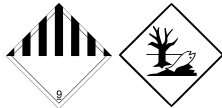
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**· 14.3 Transport hazard class(es)****· ADR, IMDG, IATA****· Class**  
**· Label**9 Miscellaneous dangerous substances and articles.  
9**· 14.4 Packing group****· ADR, IMDG, IATA**

III

**· 14.5 Environmental hazards:**

Product contains environmentally hazardous substances: zinc chloride

**· Marine pollutant:**

Symbol (fish and tree)

**· Special marking (ADR):**

Symbol (fish and tree)

**· Special marking (IATA):**

Symbol (fish and tree)

**· 14.6 Special precautions for user**

Warning: Miscellaneous dangerous substances and articles.

**· Hazard identification number (Kemler code):**

90

**· EMS Number:**

F-A,S-F

**· Segregation groups**

(SGG1) Acids

**· Stowage Category**

A

**· Stowage Code**

SW23 When transported in BK3 bulk container, see 7.6.2.12 and 7.7.3.9.

**· 14.7 Maritime transport in bulk according to IMO instruments**

Not applicable.

**· Transport/Additional information:****· ADR****· Limited quantities (LQ)**

5 kg

**· Excepted quantities (EQ)**

Code: E1

Maximum net quantity per inner packaging: 30 g

Maximum net quantity per outer packaging: 1000 g

**· Transport category**

3

**· Tunnel restriction code**

E

**· IMDG****· Limited quantities (LQ)**

5 kg

**· Excepted quantities (EQ)**

Code: E1

Maximum net quantity per inner packaging: 30 g

Maximum net quantity per outer packaging: 1000 g

**· UN "Model Regulation":**

UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (ZINC CHLORIDE), 9, III

### SECTION 15: Regulatory information

**· 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture****· Labelling according to Regulation (EC) No 1272/2008**

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

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### · Hazard pictograms



GHS05

GHS07

GHS09

### · Signal word Danger

### · Hazard-determining components of labelling:

zinc chloride

### · Hazard statements

H314 Causes severe skin burns and eye damage.

H335 May cause respiratory irritation.

H411 Toxic to aquatic life with long lasting effects.

### · Precautionary statements

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

P271 Use only outdoors or in a well-ventilated area.

P273 Avoid release to the environment.

P280 Wear protective gloves / eye protection.

P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].

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 doctor.

P391 Collect spillage.

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

### · Directive 2012/18/EU

### · Named dangerous substances - ANNEX I

 None of the ingredients is listed.

### · Seveso category E2

 Hazardous to the Aquatic Environment

### · Qualifying quantity (tonnes) for the application of lower-tier requirements

 200 t

### · Qualifying quantity (tonnes) for the application of upper-tier requirements

 500 t

### · 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.

### · Relevant phrases

H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

H319 Causes serious eye irritation.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

### · Department issuing SDS:

 Product Safety Department

### · Contact:

 Hr. Dörr

### · 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)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

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vPvB: very Persistent and very Bioaccumulative

Acute Tox. 4: Acute toxicity – Category 4

Skin Corr. 1B: Skin corrosion/irritation – Category 1B

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

Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

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

Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2

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