

# Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)



Trade name : Klister SILVER  
Revision date : 07.11.2023  
Print date : 09.12.2024

Version (Revision) : 9.0.0 (8.0.0)

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

### 1.1 Product identifier

Klister SILVER

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

#### Relevant identified uses

Plating agent

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

#### Supplier

HOLMENKOL GmbH

**Street :** Monrepos 7

**Postal code/City :** 71634 Ludwigsburg

**Country :** Deutschland

**Telephone :** +49 7141 3894 0

**Telefax :** +49 7141 3894 100

**Information contact :** info@eimermacher.de  
www.eimermacher.de

### 1.4 Emergency telephone number

Germany: Poisons Information Centre Berlin  
Charité – Universitätsmedizin Berlin  
Campus Benjamin Franklin  
Haus VIII, UG  
Hindenburgdamm 30  
D-12203 Berlin  
+49(0)30/30686 700, Internat. INFOTRAC +1 3523233500

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

**Classification according to Regulation (EC) No 1272/2008 [CLP]**

None

### 2.2 Label elements

None

### 2.3 Other hazards

On the basis of available data, the product does not contain any PBT or vPvB in percentage greater than 0,1%.

#### Adverse human health effects and symptoms

This product does not contain a substance that has endocrine disrupting properties with respect to humans as no components meets the criteria.

#### Adverse environmental effects

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

## SECTION 3: Composition/information on ingredients

### 3.2 Mixtures

#### Hazardous ingredients

None

# Safety Data Sheet

## according to Regulation (EC) No. 1907/2006 (REACH)



Trade name : Klister SILVER  
Revision date : 07.11.2023  
Print date : 09.12.2024

Version (Revision) : 9.0.0 (8.0.0)

### SECTION 4: First aid measures

#### 4.1 Description of first aid measures

##### General information

When in doubt or if symptoms are observed, get medical advice.

##### Following inhalation

Remove casualty to fresh air and keep warm and at rest. In case of respiratory tract irritation, consult a physician.

##### In case of skin contact

Remove mechanically (e.g. dab away using wadding or cellulose material) then thoroughly wash the affected skin with a mild cleansing agent and water. After contact with molten product, cool skin area rapidly with cold water. In case of skin irritation, consult a physician.

##### After eye contact

In case of eye irritation consult an ophthalmologist.

##### Following ingestion

Do NOT induce vomiting. Observe risk of aspiration if vomiting occurs. Seek medical advice immediately (poison centre).

#### 4.2 Most important symptoms and effects, both acute and delayed

##### Symptoms

Important or further important known symptoms and effects are described in the GHS labelling of the product (see section 2) and in section 11 (Toxicological information). (Further) symptoms and/or effects are not yet known. In our experience, no special hazards are to be expected if the product is handled properly and is used as intended.

#### 4.3 Indication of any immediate medical attention and special treatment needed

treatment: Symptoms (decontamination, vital functions), no known specific antidote.

### SECTION 5: Firefighting measures

#### 5.1 Extinguishing media

Sand , Carbon dioxide (CO<sub>2</sub>) , Dry extinguishing powder , Co-ordinate fire-fighting measures to the fire surroundings.

##### Unsuitable extinguishing media

Water

#### 5.2 Special hazards arising from the substance or mixture

Thermal decomposition can lead to the escape of irritating gases and vapours.

#### 5.3 Advice for firefighters

##### Special protective equipment for firefighters

Full protection suit , Use suitable breathing apparatus.

#### 5.4 Additional information

Move undamaged containers from immediate hazard area if it can be done safely.

### SECTION 6: Accidental release measures

#### 6.1 Personal precautions, protective equipment and emergency procedures

See protective measures under point 7 and 8. Special danger of slipping by leaking/spilling product. Provide adequate ventilation.

#### 6.2 Environmental precautions

Do not allow to enter into surface water or drains.

#### 6.3 Methods and material for containment and cleaning up

Take up mechanically. Clear contaminated areas thoroughly. Treat the recovered material as prescribed in the section on waste disposal.

# Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)



Trade name : Klister SILVER  
Revision date : 07.11.2023  
Print date : 09.12.2024

Version (Revision) : 9.0.0 (8.0.0)

## 6.4 Reference to other sections

Safe handling: see section 7  
Personal protection equipment: see section 8  
Disposal: see section 13

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

Use only in well-ventilated areas. It is recommended to design all work processes always so that the following is excluded: Inhalation of vapours or spray/mists  
Use only in well-ventilated areas.

### 7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed. Protect against UV-radiation/sunlight , Heat.

#### Requirements for storage rooms and vessels

Floors should be impervious, resistant to liquids and easy to clean. Keep/Store only in original container. Keep container tightly closed.

#### Hints on joint storage

Storage class (TRGS 510) : 11

### 7.3 Specific end use(s)

Observe instructions for use. see section 1.2

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

None

### 8.2 Exposure controls

#### Personal protection equipment

Use personal protection equipment.

#### Eye/face protection



Eye glasses with side protection EN 166

#### Skin protection

##### Hand protection



**By short-term hand contact** : Hand protection is not required.

**By long-term hand contact** : Check leak tightness/impermeability prior to use.

Suitable material Butyl caoutchouc (butyl rubber) , NBR (Nitrile rubber)

Breakthrough time 480 min

**Remark** : When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. EN ISO 374

##### Body protection

Wear anti-static footwear and clothing

Protective clothing. EN 13034 Natural fibres (e.g. cotton) , heat-resistant synthetic fibres

Chemical resistant safety shoes DIN EN 13832-2

#### Respiratory protection

# Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)



Trade name : Klistor SILVER  
Revision date : 07.11.2023  
Print date : 09.12.2024

Version (Revision) : 9.0.0 (8.0.0)

Usually no personal respiratory protection necessary.

## General information

When using do not eat, drink, smoke, sniff. Wash hands before breaks and after work.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

**Appearance :** Liquid  
**Colour :** diverse  
**Odour :** characteristic

#### Safety characteristics

<b>Physical state :</b>		Liquid	
<b>Melting point/freezing point :</b>		No data available	
<b>Melting point/freezing point :</b>	( 1013 hPa )	No data available	
<b>Initial boiling point and boiling range :</b>	( 1013 hPa )	No data available	
<b>Decomposition temperature :</b>		not determined	
<b>Flash point :</b>	>	185 °C	
<b>Auto-ignition temperature :</b>		not applicable	
<b>Lower explosion limit :</b>		not applicable	
<b>Upper explosion limit :</b>		not applicable	
<b>Vapour pressure :</b>	( 50 °C )	not applicable	
<b>Density :</b>	( 20 °C )	No data available	
<b>Solvent separation test :</b>	( 20 °C )	No data available	
<b>Water solubility :</b>	( 20 °C )	practically insoluble	
<b>Fat solubility :</b>	( 20 °C )	Not determined.	
<b>pH :</b>		not applicable	
<b>log P O/W :</b>		not determined	
<b>Flow time :</b>	( 20 °C )	not applicable	DIN-cup 4 mm
<b>Viscosity :</b>	( 20 °C )	not determined	
<b>Cinematic viscosity :</b>	( 40 °C )	not relevant	
<b>Odour threshold :</b>		not determined	
<b>Relative vapour density :</b>	( 20 °C )	not determined	
<b>Vapourisation rate :</b>		not determined	
<b>Flammable solids :</b>		Not applicable.	
<b>Flammable gases :</b>		Not applicable.	
<b>Oxidising liquids :</b>		Not relevant.	
<b>Explosive properties :</b>		Not applicable.	
<b>Corrosive to metals :</b>		Not relevant.	

### 9.2 Other information

None

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

No hazardous reaction when handled and stored according to provisions.

### 10.2 Chemical stability

The product is chemically stable under recommended conditions of storage, use and temperature.

### 10.3 Possibility of hazardous reactions

No known hazardous reactions.

### 10.4 Conditions to avoid

See section 7 of the safety data sheet.

### 10.5 Incompatible materials

# Safety Data Sheet

## according to Regulation (EC) No. 1907/2006 (REACH)



Trade name : Klister SILVER  
Revision date : 07.11.2023  
Print date : 09.12.2024

Version (Revision) : 9.0.0 (8.0.0)

None known.

### 10.6 Hazardous decomposition products

Does not decompose when used for intended uses.

## 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.

#### Corrosion

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)

##### Carcinogenicity

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

##### Germ cell mutagenicity

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 potential:

The product does not contain any substance above the legal limits that is included in the list established under Article 59(1) of Regulation (EC) No 1907/2006 on the basis of endocrine disrupting properties or that has endocrine disrupting or endocrine damaging properties according to Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

Other indications of toxicity

The product has not been tested. The statements on toxicology were derived from the properties of the individual components.

## SECTION 12: Ecological information

### 12.1 Toxicity

The product has not been tested. The statement is derived from the properties of the single components.

#### Aquatic toxicity

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

### 12.2 Persistence and degradability

The insoluble part can be precipitated mechanically in suitable sewage treatment plants.

### 12.3 Bioaccumulative potential

No information available.

### 12.4 Mobility in soil

No information available.

### 12.5 Results of PBT and vPvB assessment

# Safety Data Sheet

## according to Regulation (EC) No. 1907/2006 (REACH)



**Trade name :** Klister SILVER  
**Revision date :** 07.11.2023  
**Print date :** 09.12.2024

**Version (Revision) :** 9.0.0 (8.0.0)

This product does not contain components in concentrations of 0.1% or higher which are classified as either persistent, bioaccumulative and toxic (PBT) or very persistent and very bioaccumulative (vPvB).

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

### 12.6 Endocrine disrupting properties

The product does not contain any substance above the legal limits that is included in the list established under Article 59(1) of Regulation (EC) No 1907/2006 on the basis of endocrine disrupting properties or that has endocrine disrupting or endocrine damaging properties according to Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

### 12.7 Other adverse effects

The product does not contain any substances listed in Regulation (EC) 1005/2009 on substances that deplete the ozone layer.

### 12.8 Additional ecotoxicological information

#### Additional information

Do not allow uncontrolled discharge of product into the environment.

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

Dispose according to legislation.

### 13.2 Additional information

Non-contaminated packages may be recycled.

## SECTION 14: Transport information

### 14.1 UN number or ID number

No dangerous good in sense of these transport regulations.

### 14.2 UN proper shipping name

No dangerous good in sense of these transport regulations.

### 14.3 Transport hazard class(es)

No dangerous good in sense of these transport regulations.

### 14.4 Packing group

No dangerous good in sense of these transport regulations.

### 14.5 Environmental hazards

No dangerous good in sense of these transport regulations.

### 14.6 Special precautions for user

None

### 14.7 Maritime transport in bulk according to IMO instruments

No transport as bulk according to IBC Code.

## SECTION 15: Regulatory information

### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

#### National regulations

##### Water hazard class

Classification according to AwSV - Class : nwg (Non-hazardous to water)

### 15.2 Chemical Safety Assessment

A chemical safety assessment has not been carried out for this preparation. For the following substances of this mixture/preparation a chemical safety assessment has been carried out :

None

# Safety Data Sheet

## according to Regulation (EC) No. 1907/2006 (REACH)



Trade name : Klister SILVER  
Revision date : 07.11.2023  
Print date : 09.12.2024

Version (Revision) : 9.0.0 (8.0.0)

### SECTION 16: Other information

#### 16.1 Indication of changes

02. Classification of the substance or mixture · 02. Labelling according to Regulation (EC) No. 1272/2008 [CLP] · 02. Labelling according to Regulation (EC) No. 1272/2008 [CLP] - Hazard components for labelling · 03. Hazardous ingredients · 11. Respiratory or skin sensitisation · 12. Aquatic toxicity · 14. UN proper shipping name - Land transport (ADR/RID) · 14. UN proper shipping name - Sea transport (IMDG) · 14. UN proper shipping name - Air transport (ICAO-TI / IATA-DGR) · 14. Transport hazard class(es) - Land transport (ADR/RID) · 14. Transport hazard class(es) - Sea transport (IMDG) · 14. Transport hazard class(es) - Air transport (ICAO-TI / IATA-DGR) · 15. Water hazard class · 15. Sum substances WGK

#### 16.2 Abbreviations and acronyms

ADR = European Agreement concerning the carriage of Dangerous goods by Road  
ADN = European Agreement concerning the Carriage of Dangerous Goods by Inland Waterways  
ATE = Estimated values for acute toxicity  
AwSV = Ordinance on Installations for Handling Substances Hazardous to Water  
CAS = Chemical Abstract Service Number  
CE = European Community  
CLP = EC Regulation 1272/2008  
CMR = cancerogen mutagen reprotoxic  
DIN = German Institute for Standardisation  
DNEL = Derived No Effect Level  
DMEL = Derived Minimum Effect Level  
EC50 = Mean effective concentration that induces a defined effect other than death in a test population  
EG = European Community  
EN = European standards  
IATA = International Air Transport Association Dangerous Goods Regulation  
IBC-Code = International Code for the construction and equipment of ships carrying dangerous chemicals in large quantities  
IMDG = International Maritime Code for dangerous goods  
ISO = International Organization for Standardization  
LC50 = Lethal Concentration 50%  
LD50 = Lethal dose 50%  
MAK = Maximum workplace concentration  
MARPOL = International Convention for the Protection of the Marine Environment from Ship-generated Litter  
NOEC = No Observed Effect Concentration  
OECD = Organisation for Economic Cooperation and Development  
PBT = Persistent, bioaccumulative and toxic  
pH = potential of hydrogen  
PNEC = Predicted no effect concentration  
PPM = parts per million  
REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals (EC Regulation 1907/2006)  
RID = Regulation concerning the international transport of dangerous goods by train  
TRGS = Technical rules for hazardous substances (german rules)  
TWA = Time-weighted average exposure limit  
UN-Number = UN number for the transport of dangerous goods  
vPvB = Very Persistent and very Bioaccumulative as for REACH Regulation  
VOC = Volatile organic Compounds

#### 16.3 Key literature references and sources for data

None

#### 16.4 Classification for mixtures and used evaluation method according to regulation (EC) No 1272/2008 [CLP]

Classification for mixtures and used evaluation method according to regulation (EC) No 1272/2008 [CLP]

#### 16.5 Relevant H- and EUH-phrases (Number and full text)

None

#### 16.6 Training advice

# Safety Data Sheet

## according to Regulation (EC) No. 1907/2006 (REACH)



**Trade name :** Klister SILVER  
**Revision date :** 07.11.2023  
**Print date :** 09.12.2024

**Version (Revision) :** 9.0.0 (8.0.0)

---

None

### 16.7 Additional information

None

---

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

---