

**Trade name:** Hartlot Silfos 2

**Product no.:** 449254

**Current version :** 2.1.1, issued: 16.04.2018

**Replaced version:** 2.1.0, issued: 10.01.2018

**Region:** GB

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

### 1.1 Product identifier

**Trade name**

**Hartlot Silfos 2**

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

**Relevant identified uses of the substance or mixture**

Industrial use

**Uses advised against**

No data available.

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

**Address**

Viega Technology GmbH & Co. KG

Viega Platz 1

57439 Attendorn

Telephone no. +49 2722 610

Fax no. + 49 2722 611415

**Information provided by / telephone**

+49 2722 61-1100

**Advice on Safety Data Sheet**

sdb\_info@umco.de

### 1.4 Emergency telephone number

For medical advice (in German and English):

+49 (0)551 192 40 (Giftinformationszentrum Nord)

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

**Classification information**

This product does not meet the classification criteria given in the Regulation (EC) No 1272/2008 (CLP).

This product does not meet the labelling criteria given in the Directives 67/548/EWG respectively 1999/45/EC (DPD)

### 2.2 Label elements

**Labelling according to Regulation (EC) No 1272/2008 (CLP Regulation)**

**Hazard pictograms**

-

**Signal word**

-

**Hazard statement(s)**

-

**Hazard statements (EU)**

EUH210 Safety data sheet available on request.

**Precautionary statement(s)**

-

**Labelling information**

The labelling (EU hazard statements) meets the criteria of annex II of Directive (EC) Nr. 1272/2008 (CLP).

### 2.3 Other hazards

No data available.

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### SECTION 3: Composition/information on ingredients

#### 3.1 Substances

Not applicable. The product is not a substance.

#### 3.2 Mixtures

##### Hazardous ingredients

No	Substance name	Additional information	
	CAS / EC / Index / REACH no	Classification (EC) 1272/2008 (CLP)	Concentration %
1	<b>silver</b>		
	7440-22-4 231-131-3 - -	-	> 0.10 - < 19.00 %-b.w.
2	<b>copper</b>		
	7440-50-8 231-159-6 - -	-	> 79.00 - < 94.00 %-b.w.

Full Text for all H-phrases and EUH-phrases: pls. see section 16

### SECTION 4: First aid measures

#### 4.1 Description of first aid measures

##### General information

Remove contaminated, soaked clothing immediately and dispose of safely. In the event of contact with hot product proceed as foreseen for burns.

##### After inhalation

Ensure supply of fresh air. In case of persisting adverse effects consult a physician.

##### After skin contact

After contact with molten product, cool quickly with cold water.

##### After eye contact

Separate eyelids, wash the eyes thoroughly with water (15 min.). Seek medical assistance.

##### After ingestion

Never give anything by mouth to an unconscious person. Do not induce vomiting. Get medical attention if pain still persists.

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

No data available.

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

No data available.

### SECTION 5: Firefighting measures

#### 5.1 Extinguishing media

##### Suitable extinguishing media

Extinguishing measures to suit surroundings.

##### Unsuitable extinguishing media

Water

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

In the event of fire, the following can be released: Carbon dioxide (CO<sub>2</sub>); Carbon monoxide (CO); Phosphorus oxides; copper oxide

#### 5.3 Advice for firefighters

Use self-contained breathing apparatus. Wear protective clothing.

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## SECTION 6: Accidental release measures

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

#### For non-emergency personnel

Refer to protective measures listed in sections 7 and 8. Avoid contact with skin, eyes and clothing.

#### For emergency responders

No data available. Personal protective equipment (PPE) - see Section 8.

### 6.2 Environmental precautions

Do not discharge into the drains/surface waters/groundwater.

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

Take up mechanically. When picked up, treat material as prescribed under heading "Disposal considerations". Embank hot liquid after spillage and let it cool down. Take up residues mechanically after solidification.

### 6.4 Reference to other sections

No data available.

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

#### Advice on safe handling

Ensure adequate ventilation. Refer to protective measures listed in section 8.

#### General protective and hygiene measures

Do not eat, drink or smoke during work time. Keep away from foodstuffs and beverages. Wash hands before breaks and after work. Avoid contact with eyes and skin. Use barrier skin cream. Do not inhale dust/fumes/aerosols.

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

#### Technical measures and storage conditions

Keep container tightly closed and dry in a cool, well-ventilated place.

#### Requirements for storage rooms and vessels

Keep in original packaging, tightly closed.

#### Advice on storage assembly

Do not store together with: Oxidizing agents

### 7.3 Specific end use(s)

No data available.

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**SECTION 8: Exposure controls/personal protection**

**8.1 Control parameters**

**Occupational exposure limit values**

No	Substance name	CAS no.	EC no.
1	copper	7440-50-8	231-159-6
<b>List of approved workplace exposure limits (WELs) / EH40</b>			
Copper			
fume			
	TWA	0.2	mg/m <sup>3</sup>
<b>List of approved workplace exposure limits (WELs) / EH40</b>			
Copper			
dusts and mists			
Cu			
	STEL	2	mg/m <sup>3</sup>
	TWA	1	mg/m <sup>3</sup>
2	silver	7440-22-4	231-131-3
<b>List of approved workplace exposure limits (WELs) / EH40</b>			
Silver (metallic)			
	TWA	0.1	mg/m <sup>3</sup>
<b>2000/39/EC</b>			
Silver, metallic			
	TWA	0.1	mg/m <sup>3</sup>

**8.2 Exposure controls**

**Appropriate engineering controls**

No data available.

**Personal protective equipment**

**Respiratory protection**

If workplace exposure limits are exceeded, a respiration protection approved for this particular job must be worn. In case of aerosol and mist formation, take appropriate measures for breathing protection in the event workplace threshold values are not specified.

Respirator P2 (EN 143)

**Eye / face protection**

Tightly fitting safety glasses (EN 166).

**Hand protection**

Sufficient protection is given wearing suitable protective gloves checked according to i.e. EN 374, in the event of risk of skin contact with the product . Before use, the protective gloves should be tested in any case for its specific work-station suitability (i.e. mechanical resistance, product compatibility and antistatic properties). Adhere to the manufacturer's instructions and information relating to the use, storage, care and replacement of protective gloves. Protective gloves shall be replaced immediately when physically damaged or worn. Design operations thus to avoid permanent use of protective gloves.

Appropriate Material leather

**Other**

Normal chemical work clothing.

**Environmental exposure controls**

No data available.

**SECTION 9: Physical and chemical properties**

**9.1 Information on basic physical and chemical properties**

Form/Colour
solid
red

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<b>Odour</b>	
No data available	
<b>Odour threshold</b>	
No data available	
<b>pH value</b>	
No data available	
<b>Boiling point / boiling range</b>	
No data available	
<b>Melting point / melting range</b>	
Value	650 - 875 °C
<b>Decomposition point / decomposition range</b>	
No data available	
<b>Flash point</b>	
No data available	
<b>Auto-ignition temperature</b>	
No data available	
<b>Oxidising properties</b>	
No data available	
<b>Explosive properties</b>	
No data available	
<b>Flammability (solid, gas)</b>	
No data available	
<b>Lower flammability or explosive limits</b>	
No data available	
<b>Upper flammability or explosive limits</b>	
No data available	
<b>Vapour pressure</b>	
No data available	
<b>Vapour density</b>	
No data available	
<b>Evaporation rate</b>	
No data available	
<b>Relative density</b>	
No data available	
<b>Density</b>	
Value	8.1 - 8.4 g/cm <sup>3</sup>
<b>Solubility in water</b>	
No data available	
<b>Solubility(ies)</b>	
No data available	
<b>Partition coefficient: n-octanol/water</b>	
No data available	
<b>Viscosity</b>	
No data available	

**9.2 Other information**

<b>Other information</b>
No data available.

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## SECTION 10: Stability and reactivity

### 10.1 Reactivity

No data available.

### 10.2 Chemical stability

Stable under recommended storage and handling conditions (See section 7).

### 10.3 Possibility of hazardous reactions

No data available.

### 10.4 Conditions to avoid

Heat

### 10.5 Incompatible materials

Oxidizing agents

### 10.6 Hazardous decomposition products

In case of fire: see section 5.

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

Acute oral toxicity			
No	Substance name	CAS no.	EC no.
1	silver	7440-22-4	231-131-3
LD50	>	2000	mg/kg bodyweight
Species	rat		
Method	OECD 401		
Acute dermal toxicity			
No data available			
Acute inhalational toxicity			
No data available			
Skin corrosion/irritation			
No	Substance name	CAS no.	EC no.
1	silver	7440-22-4	231-131-3
Species	rabbit		
Method	OECD 404		
Evaluation	non-irritant		
Serious eye damage/irritation			
No	Substance name	CAS no.	EC no.
1	silver	7440-22-4	231-131-3
Species	rabbit		
Method	OECD 405		
Evaluation	non-irritant		

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**Respiratory or skin sensitisation**

No data available

**Germ cell mutagenicity**

No data available

**Reproduction toxicity**

No data available

**Carcinogenicity**

No data available

**STOT - single exposure**

No data available

**STOT - repeated exposure**

No data available

**Aspiration hazard**

No data available

**SECTION 12: Ecological information**

**12.1 Toxicity**

**Toxicity to fish (acute)**

No data available

**Toxicity to fish (chronic)**

No data available

**Toxicity to Daphnia (acute)**

No data available

**Toxicity to Daphnia (chronic)**

No data available

**Toxicity to algae (acute)**

No data available

**Toxicity to algae (chronic)**

No data available

**Bacteria toxicity**

No data available

**12.2 Persistence and degradability**

No data available.

**12.3 Bioaccumulative potential**

No data available.

**12.4 Mobility in soil**

No data available.

**12.5 Results of PBT and vPvB assessment**

No data available.

**12.6 Other adverse effects**

No data available.

**12.7 Other information**

**Other information**

Do not discharge product unmonitored into the environment.

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## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

#### Product

Allocation of a waste code number, according to the European Waste Catalogue, should be carried out in agreement with the regional waste disposal company.

#### Packaging

Completely emptied packagings can be given for recycling. Packaging that cannot be cleaned should be disposed of in agreement with the regional waste disposal company.

## SECTION 14: Transport information

### 14.1 Transport ADR/RID/ADN

The product is not subject to ADR/RID/ADN regulations.

### 14.2 Transport IMDG

The product is not subject to IMDG regulations.

### 14.3 Transport ICAO-TI / IATA

The product is not subject to ICAO-TI / IATA regulations.

### 14.4 Other information

No data available.

### 14.5 Environmental hazards

Information on environmental hazards, if relevant, please see 14.1 - 14.3.

### 14.6 Special precautions for user

No data available.

### 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

Not relevant

## SECTION 15: Regulatory information

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

#### **Regulation (EC) No 1907/2006 (REACH) Annex XIV (List of substances subject to authorisation)**

According to the data available and/or specifications supplied by upstream suppliers, this product does not contain any substances considered as substances requiring authorisation as listed on Annex XIV of the REACH regulation (EC) 1907/2006.

#### **REACH candidate list of substances of very high concern (SVHC) for authorisation**

According to available data and the information provided by preliminary suppliers, the product does not contain substances that are considered substances meeting the criteria for inclusion in annex XIV (List of Substances Subject to Authorisation) as laid down in Article 57 and article 59 of REACH (EC) 1907/2006.

#### **Regulation (EC) No 1907/2006 (REACH) Annex XVII: RESTRICTIONS ON THE MANUFACTURE, PLACING ON THE MARKET AND USE OF CERTAIN DANGEROUS SUBSTANCES, PREPARATIONS AND ARTICLES**

According to the data available and/or specifications supplied by upstream suppliers, this product does not contain any substances requiring authorisation as listed on Annex XIV of the REACH regulation (EC) 1907/2006.

#### **Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances**

This product is not subject to Part 1 or 2 of Annex I.

### 15.2 Chemical safety assessment

No data available.



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## SECTION 16: Other information

### **Sources of key data used to compile the data sheet:**

Regulation (EC) No 1907/2006 (REACH), 1272/2008 (CLP) as amended in each case.

EC Directives 2000/39/EC, 2006/15/EC, 2009/161/EU

National Threshold Limit Values of the corresponding countries as amended in each case.

Transport regulations according to ADR, RID, IMDG, IATA as amended in each case.

The data sources used to determine physical, toxic and ecotoxic data, are indicated directly in the corresponding chapter.

### **Department issuing safety data sheet**

UMCO GmbH

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This information is based on our present knowledge and experience.

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