



# Safety Data Sheet

according to Regulation (EC) No 1907/2006

## Connex Silver Plus

Print date: 24.03.2015

Product code: 6156

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### Hazard statements

- |      |                                      |
|------|--------------------------------------|
| H225 | Highly flammable liquid and vapour.  |
| H315 | Causes skin irritation.              |
| H317 | May cause an allergic skin reaction. |
| H319 | Causes serious eye irritation.       |

### Precautionary statements

- |                |  |
|----------------|--|
| P210           | Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.                                   |
| P233           | Keep container tightly closed.   |
| P240           | Ground/bond container and receiving equipment.   |
| P241           | Use explosion-proof electrical/ventilating/lighting equipment.   |
| P242           | Use only non-sparking tools.   |
| P243           | Take precautionary measures against static discharge.  |
| P261           | Avoid breathing dust/fume/gas/mist/vapours/spray.  |
| P264           | Wash hands after handling. thoroughly after handling.  |
| P272           | Contaminated work clothing should not be allowed out of the workplace.   |
| P280           | Wear protective gloves/protective clothing/eye protection/face protection.   |
| P303+P361+P353 | IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.                              |
| P333+P313      | If skin irritation or rash occurs: Get medical advice/attention.   |
| P352           | Wash with plenty of water.   |
| P364           | And wash it before reuse.  |
| P305+P351+P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P337+P313      | If eye irritation persists: Get medical advice/attention.  |
| P370+P378      | In case of fire: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. to extinguish.                         |
| P403+P235      | Store in a well-ventilated place. Keep cool.   |
| P501           | Dispose of contents/container to Offer surplus and non-recyclable solutions to a licensed disposal company..                     |

### Special labelling of certain mixtures

- |        |  |
|--------|--|
| EUH204 | Contains isocyanates. May produce an allergic reaction.<br>Restricted to professional users. |
|--------|--|

### 2.3. Other hazards

Keep out of the reach of children.  
Irritating to eyes, respiratory system and skin. May cause sensitization by skin contact. Repeated exposure may cause skin dryness or cracking. Vapours may cause drowsiness and dizziness. When using, do not eat, drink or smoke. Wash hands before breaks and at the end of workday. Repeated absorption may cause disorder of central nervous system, liver, kidneys and blood.

## SECTION 3: Composition/information on ingredients

### 3.2. Mixtures

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### Chemical characterization

Chemical Name / INCI:  
 Alcohol (ethanol, ethyl alcohol)  
 HEMA (2-hydroxyethyl methacrylate)  
 Aqua (Water)  
 Acylphosphine  
 Pentaerythrityl Tetra-di-t-butyl Hydroxyhydrocinnamate  
 Piroctone Olamine  
 BHT  
 p-Hydroxyanisole  
 Colloidal Silver

### Hazardous components

EC No	Chemical name	Quantity
CAS No	Classification according to Directive 67/548/EEC	
Index No	Classification according to Regulation (EC) No. 1272/2008 [CLP]	
REACH No		
212-782-2	2-hydroxyethyl methacrylate	25 - 50 %
868-77-9	Xi - Irritant R36/38-43	
607-124-00-X	Eye Irrit. 2, Skin Irrit. 2, Skin Sens. 1; H319 H315 H317	
282-810-6	Acylphosphine	0,1 - 1 %
84434-11-7	N - Dangerous for the environment R43-51-53	
	Skin Sens. 1, Aquatic Chronic 2; H317 H411	

Full text of R-, H- and EUH-phrases: see section 16.

### Further Information

The classification is in compliance with coming legislation and therefore may differ from the safety label on the package.

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

#### General information

Take off all contaminated clothing immediately. Call a physician immediately.

#### After inhalation

Move to fresh air. Keep patient warm and at rest. If breathing is irregular or stopped, administer artificial respiration. If unconscious place in recovery position and seek medical advice.

#### After contact with skin

In case of contact, immediately flush skin with soap and plenty of water. If skin irritation occurs, seek medical advice/attention.

#### After contact with eyes

In case of eye contact, remove contact lens and rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Consult a physician.

#### After ingestion

Clean mouth with water and drink afterwards plenty of water. Do NOT induce vomiting. If unconscious place in recovery position and seek medical advice.

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

Vapours may cause irritation to the eyes, respiratory system and the skin. May cause sensitization by skin contact. Vapours may cause drowsiness and dizziness. Symptoms: Exposure may result in reddening, tears and itching of the eyes and soreness in the nose and throat, together with coughing. Difficulty in breathing. May cause headache and dizziness. Unconsciousness. Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in non-allergic

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contact dermatitis and absorption through the skin.

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

Treat symptomatically.

## **SECTION 5: Firefighting measures**

### **5.1. Extinguishing media**

#### **Suitable extinguishing media**

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

#### **Unsuitable extinguishing media**

Do not use a solid water stream as it may scatter and spread fire.

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

Vapours are heavier than air and may spread along floors. Vapors may spread long distances and ignite. Vapours may form explosive mixtures with air. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapours). Keep away from sources of ignition - No smoking. Use water spray to cool unopened containers. Container may rupture on heating.

### **5.3. Advice for firefighters**

Wear self-contained breathing apparatus and protective suit. Use only explosion-proof equipment.

#### **Additional information**

Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Prevent fire extinguishing water from contaminating surface water or the ground water system.

## **SECTION 6: Accidental release measures**

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

Ensure adequate ventilation. Evacuate personnel to safe areas. Use personal protective equipment. Keep away from sources of ignition - No smoking. Avoid breathing vapors, mist or gas. Avoid contact with skin and eyes.

### **6.2. Environmental precautions**

Do not flush into surface water or sanitary sewer system. If the product contaminates rivers and lakes or drains inform respective authorities.

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

Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13). Ensure adequate ventilation. Use explosion-proof equipment.

## **SECTION 7: Handling and storage**

### **7.1. Precautions for safe handling**

#### **Advice on safe handling**

Use only with adequate ventilation. Handle and open container with care. Avoid contact with skin, eyes and clothing. Avoid breathing vapors, mist or gas. Wash hands before breaks and at the end of workday.

#### **Advice on protection against fire and explosion**

Keep away from heat and sources of ignition. Do not smoke.  
Take measures to prevent the build up of electrostatic charge.

#### **Further information on handling**

When using, do not eat, drink or smoke.

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

#### **Requirements for storage rooms and vessels**

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

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Storage must be in accordance with the BetrSichV (Germany). Keep away from direct sunlight.

### Advice on storage compatibility

Keep away from food, drink and animal feedingstuffs.

Materials to avoid: Oxidizing and spontaneously flammable products, Flammable materials, Organic peroxides, Oxidizing agents

### 7.3. Specific end use(s)

Cosmetic product

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### Exposure limits (EH40)

CAS No	Substance	ppm	mg/m <sup>3</sup>	fibres/ml	Category	Origin
64-17-5	Ethanol	1000	1920		TWA (8 h)	WEL
		-	-		STEL (15 min)	WEL

#### DNEL/DMEL values

CAS No	Substance	Exposure route	Effect	Value
64-17-5	ethanol, ethyl alcohol			
Worker DNEL, long-term		inhalation	systemic	950 mg/m <sup>3</sup>
Worker DNEL, acute		inhalation	local	1900 mg/m <sup>3</sup>
Worker DNEL, long-term		dermal	systemic	343 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	114 mg/m <sup>3</sup>
Consumer DNEL, acute		inhalation	local	950 mg/m <sup>3</sup>
Consumer DNEL, long-term		dermal	systemic	206 mg/kg bw/day
Consumer DNEL, long-term		oral	systemic	87 mg/kg bw/day
868-77-9	2-hydroxyethyl methacrylate			
Worker DNEL, long-term		inhalation	systemic	4,9 mg/m <sup>3</sup>
Worker DNEL, long-term		dermal	systemic	1,3 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	2,9 mg/m <sup>3</sup>
Consumer DNEL, long-term		dermal	systemic	0,83 mg/kg bw/day
Consumer DNEL, long-term		oral	systemic	0,83 mg/kg bw/day

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### PNEC values

CAS No	Substance	
	Environmental compartment	Value
64-17-5	ethanol, ethyl alcohol	
	Freshwater	0,96 mg/l
	Marine water	0,79 mg/l
	Freshwater sediment	3,6 mg/kg
	Marine sediment	2,9 mg/kg
	Soil	0,63 mg/kg
	Secondary poisoning	720 mg/kg
868-77-9	2-hydroxyethyl methacrylate	
	Freshwater	0,482 mg/l
	Marine water	0,482 mg/l
	Micro organisms in sewage treatment plants (STP)	10 mg/l
	Freshwater sediment	3,79 mg/kg
	Marine sediment	3,79 mg/kg
	Soil	0,476 mg/kg

### 8.2. Exposure controls

#### Appropriate engineering controls

Information about special precautions needed for bulk handling is available on request.

#### Protective and hygiene measures

Handle and open container with care. Keep away from food, drink and animal feedingstuffs. Avoid contact with skin, eyes and clothing. Take off all contaminated clothing immediately. Wash hands before breaks and at the end of workday.

#### Eye/face protection

Tightly fitting safety goggles

#### Hand protection

Use protective skin cream before handling the product. Solvent-resistant gloves (butyl-rubber) Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time. Replace when worn.

#### Skin protection

Protective suit

#### Respiratory protection

Use only with adequate ventilation. In case of insufficient ventilation wear suitable respiratory equipment. Respiratory protection complying with EN 141.

#### Environmental exposure controls

The product should not be allowed to enter drains, water courses or the soil. Inform the responsible authorities in case of gas leakage, or of entry into waterways, soil or drains.

## SECTION 9: Physical and chemical properties

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

Physical state: liquid  
 Colour: colourless

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Odour: characteristic

### Test method

#### Changes in the physical state

Initial boiling point and boiling range: 78 °C

Flash point: 12 °C

Lower explosion limits: 3,5 vol. %

Upper explosion limits: 15 vol. %

Ignition temperature: 375 °C

Vapour pressure:  
(at 20 °C) 58 hPa

Vapour pressure:  
(at 50 °C) 293 hPa

Density: >0,89 g/cm<sup>3</sup>

Water solubility: insoluble

#### Solubility in other solvents

miscible with most organic solvents

Solvent content: 53,99 %

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

No data is available on the product itself.

### 10.2. Chemical stability

Keep containers tightly closed in a cool, well-ventilated place.

### 10.4. Conditions to avoid

Keep away from direct sunlight. Do not expose to temperatures above 40 °C.

### 10.5. Incompatible materials

See chapter 7.

Oxidizing agents, Peroxides.

### 10.6. Hazardous decomposition products

acetic acid. In case of fire hazardous decomposition products may be produced such as: Carbon dioxide (CO<sub>2</sub>), carbon monoxide (CO), oxides of nitrogen (NO<sub>x</sub>), dense black smoke.

### Further information

Vapours may form explosive mixtures with air.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

#### Acute toxicity

CAS No	Chemical name				
	Exposure routes	Method	Dose	Species	Source
868-77-9	2-hydroxyethyl methacrylate				
	oral	LD50	5050 mg/kg	Rat	
	dermal	LD50	>5000 mg/kg	rabbit	
84434-11-7	Acylphosphine				
	oral	LD50	>5000 mg/kg	rat	
	dermal	LD50	>2000 mg/kg	rat	

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### Irritation and corrosivity

No data is available on the product itself.  
Irritating to eyes and skin.

### Sensitising effects

May cause sensitization by skin contact.

### Specific effects in experiment on an animal

No data is available on the product itself.

### Additional information on tests

No data is available on the product itself.

### Practical experience

#### Observations relevant to classification

Health injuries are not known or expected under normal use.

#### Other observations

Health injuries are not known or expected under normal use.

#### Further information

Harmful if swallowed. Effects due to ingestion may include: Nausea, narcosis, Weakness, Dizziness, Unconsciousness. If inhaled: Irritation of mucous membranes, Dizziness. Repeated exposure may cause skin dryness or cracking.

## SECTION 12: Ecological information

### 12.1. Toxicity

CAS No	Chemical name					
	Aquatic toxicity	Method	Dose	[h]   [d]	Species	Source
868-77-9	2-hydroxyethyl methacrylate					
	Acute fish toxicity	LC50	227 mg/l	96 h	Pimephales promelas	
	Acute algae toxicity	ErC50	836 mg/l	72 h	Selenastrum capricornutum (green algae)	OECD Test Guideline 201
	Acute crustacea toxicity	EC50	380 mg/l	48 h	Daphnia magna (Water flea)	OECD Test Guideline 202
	Algae toxicity	NOEC	400 mg/l	3 d	Selenastrum capricornutum (green algae)	OECD Test Guideline 201
	Crustacea toxicity	NOEC	171 mg/l	2 d	Daphnia magna (Water flea)	OECD Test Guideline 202
	Acute bacteria toxicity		(8560 mg/l)	3 h		
84434-11-7	Acyolphosphine					
	Acute fish toxicity	LC50	1,89 mg/l	96 h	Brachydanio rerio (zebra fish)	OECD Test Guideline 203
	Acute algae toxicity	ErC50	>1-10 mg/l	72 h		OECD Test Guideline 201
	Acute crustacea toxicity	EC50	10-100 mg/l	48 h	Daphnia magna (Water flea)	OECD Test Guideline 202

### 12.2. Persistence and degradability

CAS No	Chemical name			
	Method	Value	d	Source
	Evaluation			
868-77-9	2-hydroxyethyl methacrylate			
		92-100%	14	
	Readily biodegradable.			

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#### 12.3. Bioaccumulative potential

##### Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
868-77-9	2-hydroxyethyl methacrylate	0,42

##### BCF

CAS No	Chemical name	BCF	Species	Source
868-77-9	2-hydroxyethyl methacrylate	1,34-1,54		

#### 12.4. Mobility in soil

No data is available on the product itself.

#### 12.5. Results of PBT and vPvB assessment

No data is available on the product itself.

#### 12.6. Other adverse effects

no data available.

#### Further information

no data available.

Do not flush into surface water or sanitary sewer system.

### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

##### Advice on disposal

Dispose of contents/container in accordance with local regulation.

##### Waste disposal number of waste from residues/unused products

080111 WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS; wastes from MFSU and removal of paint and varnish; waste paint and varnish containing organic solvents or other dangerous substances  
Classified as hazardous waste.

##### Waste disposal number of used product

080111 WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS; wastes from MFSU and removal of paint and varnish; waste paint and varnish containing organic solvents or other dangerous substances  
Classified as hazardous waste.

##### Waste disposal number of contaminated packaging

080111 WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS; wastes from MFSU and removal of paint and varnish; waste paint and varnish containing organic solvents or other dangerous substances  
Classified as hazardous waste.

##### Contaminated packaging

Dispose of contents/container in accordance with local regulation.

### SECTION 14: Transport information

#### Land transport (ADR/RID)

**14.1. UN number:** UN 1263

**14.2. UN proper shipping name:** Paint

**14.3. Transport hazard class(es):** 3

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**14.4. Packing group:**

II

Hazard label:

3



Classification code:

F1

Special Provisions:

163 640C 650

Limited quantity:

5 L

Transport category:

2

Hazard No:

33

Tunnel restriction code:

D/E

**Other applicable information (land transport)**

E2

**Inland waterways transport (ADN)****14.1. UN number:**

UN 1263

**14.2. UN proper shipping name:**

Paint

**14.3. Transport hazard class(es):**

3

**14.4. Packing group:**

II

Hazard label:

3



Classification code:

F1

Special Provisions:

163 640C 650

Limited quantity:

5 L

**Other applicable information (inland waterways transport)**

E2

**Marine transport (IMDG)****14.1. UN number:**

UN 1263

**14.2. UN proper shipping name:**

Paint

**14.3. Transport hazard class(es):**

3

**14.4. Packing group:**

II

Hazard label:

3



Special Provisions:

163

Limited quantity:

5 L

EmS:

F-E, S-E

**Other applicable information (marine transport)**

E2

**Air transport (ICAO)****14.1. UN number:**

UN 1263

**14.2. UN proper shipping name:**

Paint

**14.3. Transport hazard class(es):**

3

**14.4. Packing group:**

II

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Hazard label: 3



Special Provisions: A3 A72

Limited quantity Passenger: 1 L

IATA-packing instructions - Passenger: 353

IATA-max. quantity - Passenger: 5 L

IATA-packing instructions - Cargo: 364

IATA-max. quantity - Cargo: 60 L

### Other applicable information (air transport)

E2  
Y341

## SECTION 15: Regulatory information

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

#### EU regulatory information

2010/75/EU (VOC): 53,985 % (480,467 g/l)

2004/42/EC (VOC): 83,985 % (747,467 g/l)

Subcategory according to Directive 2004/42/EC: Special finishes - All types, VOC limit value: 840 g/l

#### Additional information

Take note of Dir 92/85/EEC on the safety and health at work of pregnant workers. Take note of Dir 94/33/EC on the protection of young people at work.

#### National regulatory information

Employment restrictions: Observe employment restrictions for young people.

Water contaminating class (D): 1 - slightly water contaminating

## SECTION 16: Other information

#### Relevant R-phrases (Number and full text)

- 36/38 Irritating to eyes and skin.
- 43 May cause sensitisation by skin contact.
- 51 Toxic to aquatic organisms.
- 53 May cause long-term adverse effects in the aquatic environment.

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

- H225 Highly flammable liquid and vapour.
- H315 Causes skin irritation.
- H317 May cause an allergic skin reaction.
- H319 Causes serious eye irritation.
- H411 Toxic to aquatic life with long lasting effects.
- EUH204 Contains isocyanates. May produce an allergic reaction.

#### Further Information

All data refer to the product upon delivery

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

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*(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)*