Safety data sheet in accordance with regulation (EC) No 1907/2006



Trade name: Cupri sulfas pentahydr

Version: 3 / CH Replaces Version: 2 / CH Date revised: 23.04.2019 Print date: 01.10.19

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

1.1. Product identifier

Substance number: 063168

Cupri sulfas pentahydr Item No.

06316800

1.3. Details of the supplier of the safety data sheet

Address/Manufacturer

Hänseler AG Industriestrasse 35 9100 Herisau Telephone no. 0041 (0)71 353 58 58 E-mail address of sdb@haenseler.ch person responsible for this SDS

1.4. Emergency telephone number

Switzerland :145 / Abroad +41 (0)44 251 51 51

SECTION 2: Hazards identification ***

2.1. Classification of the substance or mixture

Classification (Regulation (EC) No. 1272/2008)

Classification (Regulation (EC) No. 1272/2008)

Acute Tox. 4	H302
Skin Irrit. 2	H315
Eye Irrit. 2	H319
Aquatic Acute 1	H400
Aquatic Chronic 1	H410

The product is classified and labelled in accordance with Regulation (EC) No 1272/2008 For explanation of abbreviations see section 16.

2.2. Label elements

Labelling according to regulation (EC) No 1272/2008

Hazard pictograms

	¥2
Signal word	
Warning	
Hazard stateme	nts
H302	Harmful if swallowed.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H410	Very toxic to aquatic life with long lasting effects.
Precautionary s	tatements ***
P264.1	Wash hands thoroughly after handling.
P273	Avoid release to the environment.

Safety data sheet in accorda	nce with regulation (EC)	No 1907/200	6	
Trade name: Cupri sulfas pen	tahydr			
Substance number: 063168	Version	: 3 / CH		Date revised: 23.04.201
	Replace	es Version: 2/	CH	Print date: 01.10.7
P280 P305+P351+P338 P330 P501.3	Wear protective gloves/p IF IN EYES: Rinse cauti lenses, if present and ea Rinse mouth. Disposal in compliance v	ously with wat asy to do. Con	er for several m tinue rinsing.	inutes. Remove contact
Hazardous compone	nt(s) to be indicated or		-	
contains ***	Copper sulfate pentahyo	• •		,
SECTION 3: Compos	ition/information	on ingred	lients ***	
Molecular weight				
Value	249.68		g/mol	
Hazardous ingredien	ts ***			
Copper sulfate pental CAS No. EINECS no. Concentration Classification (Regula	7758-99-8 231-847-6 >= 50 ation (EC) No. 1272/2008) Acute Tox. 4 Skin Irrit. 2 Eye Irrit. 2 Aquatic Acute 1 Aquatic Chronic 1	H302 H315 H319 H400 H410	%	
SECTION 4: First aid 4.1. Description of first				
After inhalation	ald measures			
Ensure supply of fres	h air.			
After skin contact				
	n, wash immediately with p ose of safely.	lenty of water	. Remove conta	minated, soaked clothing
After eye contact				
Separate eyelids, was	sh the eyes thoroughly with	n water (15 mi	n.). Summon a	doctor immediately.
After ingestion				
Let plenty of water be	drunk in small gulps. Sum	nmon a doctor	immediately.	

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

Irritation of mucosa, Coughing, Shortness of breath, Vomiting, Diarrhoea, Death

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Extinguishing measures to suit surroundings

5.2. Special hazards arising from the substance or mixture

The product is not combustible. If a fire breaks out nearby evolution of dangerous gases possible. In the event of fire the following can be released: Sulfuroxides (SOx)

5.3. Advice for firefighters

Special protective equipment for fire-fighting

Safety data sheet in accordance with regulation (EC) No 1907/2006



Trade name: Cupri sulfas pentahydr

Substance number: 063168

Version: 3 / CH Replaces Version: 2 / CH Date revised: 23.04.2019

Print date: 01.10.19

Use self-contained breathing apparatus. Use personal protective clothing.

Other information

Suppress vapours with water spray jet. Do not discharge into surface waters/groundwater.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures Avoid dust formation. Do not inhale dust. Avoid contact with skin, eyes and clothing. Ensure supply of fresh air.

6.2. Environmental precautions

Do not empty into drains.

6.3. Methods and material for containment and cleaning up

To pick up dry. Dampen, pick up mechanically and dispose of. Clean up affected area.

SECTION 7: Handling and storage

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep in a dry place.

Hints on storage assembly

Do not store together with: solvents

Storage classes

Storage class according to TRGS 510	13
Storage category (Switzerland)	11/13

Non- combustible solids Other solid hazardous substances with hazardous classification/labelling

Further information on storage conditions

Keep container tightly closed.

SECTION 8: Exposure controls/personal protection

8.2. Exposure controls

General protective and hygiene measures

Wash contaminated clothing before reuse. Wash hands and face after work. Preventative skin protection.

Respiratory protection

Breathing apparatus in the event of aerosol. Particle filter P2

Hand protection

Gloves Appropriate Material

nitrile rubber - NBR

Eye protection

necessary

Body protection

protective overalls

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Form Colour

-	-	on (EC) N				SWISS PHARMA
Trade name: Cupri sulfas pentahydr						
Substance number: 063168		Version:	3 / CH			Date revised: 23.04.201
		Replaces	Version:	2 / CH		Print date: 01.10.7
Odour	odourle	ess				
pH value						
Value		3.5	to	4.5		
Concentration/H2O		50 20	g/l °C			
Temperature		20				
Melting point Remarks	Not an	plicable				
Flash point	Νοι αρ	plicable				
Value		°C				
Remarks	Not ap	plicable				
Vapour pressure						
Remarks	Not ap	plicable				
Density	-	-				
Value		2.29			g/cm³	
Temperature		20	°C			
Solubility in water						
Value		317			g/l	
Temperature		20	°C			
Decomposition temperatu	re	00		0.45	.	
Value		88	to	245	°C	
9.2. Other information						
Bulk density						
Value	appr.	900	to	1200	kg/m³	
SECTION 10: Stability an	d reactiv	∕itv				
10.1. Reactivity No decomposition if stored a			d.			
10.2. Chemical stability No decomposition if stored						
10.3. Possibility of hazardou Oxidising agents	s reaction	าร				
10.4. Conditions to avoid Heat						
10.5. Incompatible materials Reacts violently with: Strong	oxidising a	gents, Ma	gnesium	1		
10.6. Hazardous decomposition In the event of fire the follow			sulphuro	us oxides	(SOx)	
SECTION 11: Toxicologic	al inform	nation				
11.1. Information on toxicolo Acute oral toxicity	ogical effe	ects				
Actice oral toxicity	QA	60			mg/kg	
Method			egulatior	n (EC) No.	1272/2008))
		```	-	. ,	,	

	with regulat	ion (EC) No			HANSELER (
Frade name: Cupri sulfas pentahyd	r				
Substance number: 063168		Version: 3	/ CH		Date revised: 23.04.201
		Replaces V	ersion: 2/CH		Print date: 01.10.7
Copper sulfate pentahydrat	te				
Species	rat				
LD50		960		mg/kg	
Acute dermal toxicity (Co	-	)			
Copper sulfate pentahydrat Species	te rat				
LD50		2000		mg/kg	
Skin corrosion/irritation				00	
evaluation	irritant				
Serious eye damage/irrita	tion				
evaluation	irritant				
Remarks	risk				
Mutagenicity	_				
Remarks	negative				
Experience in practice					
Irritates the mucous membr	rane. Irritatio	n			
Other information Observe the usual precauti					
		-	ais.		
ECTION 12: Ecological		-	ais.		
ECTION 12: Ecological 12.1. Toxicity Fish toxicity	informa	<u>ition</u>			
SECTION 12: Ecological 12.1. Toxicity Fish toxicity Species	informa rainbow t	trout (Oncor	nynchus mykiss)	ma/l	
ECTION 12: Ecological 12.1. Toxicity Fish toxicity	informa rainbow t	<u>ition</u>	nynchus mykiss)	mg/l	
SECTION 12: Ecological 12.1. Toxicity Fish toxicity Species LC50	rainbow t	trout (Oncorr	nynchus mykiss)	mg/l	
ECTION 12: Ecological 12.1. Toxicity Fish toxicity Species LC50 Duration of exposure Fish toxicity (Components	informa rainbow t C g s)	trout (Oncorr	nynchus mykiss)	mg/l	
SECTION 12: Ecological 12.1. Toxicity Fish toxicity Species LC50 Duration of exposure Fish toxicity (Components Copper sulfate pentahydrat Reference substance	rainbow t rainbow t g s) te Copper s	trout (Oncorf 0.03 96 h	nynchus mykiss)	mg/l	
SECTION 12: Ecological 12.1. Toxicity Fish toxicity Species LC50 Duration of exposure Fish toxicity (Components Copper sulfate pentahydrat Reference substance Species	rainbow t rainbow t g s) te Copper s rainbow t	trout (Oncorf ).03 96 h sulphate trout (Oncorf	nynchus mykiss) nynchus mykiss)		
SECTION 12: Ecological 12.1. Toxicity Fish toxicity Species LC50 Duration of exposure Fish toxicity (Components Copper sulfate pentahydrat Reference substance Species LC50	rainbow t rainbow t g s) te Copper s rainbow t	trout (Oncorf 0.03 96 h	nynchus mykiss) nynchus mykiss)	mg/l mg/l	
SECTION 12: Ecological 12.1. Toxicity Fish toxicity Species LC50 Duration of exposure Fish toxicity (Components Copper sulfate pentahydrat Reference substance Species LC50 Daphnia toxicity	rainbow t c s) te Copper s rainbow t	trout (Oncorf 0.03 96 h sulphate trout (Oncorf 0.11	nynchus mykiss) nynchus mykiss)		
SECTION 12: Ecological 12.1. Toxicity Fish toxicity Species LC50 Duration of exposure Fish toxicity (Components Copper sulfate pentahydrat Reference substance Species LC50	rainbow t rainbow t g s) te Copper s rainbow t C Daphnia	trout (Oncorf 0.03 96 h sulphate trout (Oncorf 0.11	nynchus mykiss) nynchus mykiss)	mg/l	
SECTION 12: Ecological 12.1. Toxicity Fish toxicity Species LC50 Duration of exposure Fish toxicity (Components Copper sulfate pentahydrat Reference substance Species LC50 Daphnia toxicity Species	rainbow t rainbow t g s) te Copper s rainbow t C Daphnia	trout (Oncorf ).03 )6 h sulphate trout (Oncorf ).11 magna	nynchus mykiss) nynchus mykiss)		
SECTION 12: Ecological 12.1. Toxicity Fish toxicity Species LC50 Duration of exposure Fish toxicity (Components Copper sulfate pentahydrat Reference substance Species LC50 Daphnia toxicity Species EC50	informa rainbow t C g s) te Copper s rainbow t C Daphnia	trout (Oncorf ).03 )6 h sulphate trout (Oncorf ).11 magna	nynchus mykiss) nynchus mykiss)	mg/l	
SECTION 12: Ecological 12.1. Toxicity Fish toxicity Species LC50 Duration of exposure Fish toxicity (Components Copper sulfate pentahydrat Reference substance Species LC50 Daphnia toxicity Species EC50 Duration of exposure	informa rainbow t C g s) te Copper s rainbow t C Daphnia	trout (Oncorf ).03 )6 h sulphate trout (Oncorf ).11 magna	nynchus mykiss) nynchus mykiss)	mg/l	
SECTION 12: Ecological 12.1. Toxicity Fish toxicity Species LC50 Duration of exposure Fish toxicity (Components Copper sulfate pentahydrat Reference substance Species LC50 Daphnia toxicity Species EC50 Duration of exposure 12.2. Persistence and degrat	informa rainbow t C g s) te Copper s rainbow t C Daphnia	trout (Oncorf ).03 )6 h sulphate trout (Oncorf ).11 magna ).2 18 h	nynchus mykiss) nynchus mykiss)	mg/l	
SECTION 12: Ecological 12.1. Toxicity Fish toxicity Species LC50 Duration of exposure Fish toxicity (Components Copper sulfate pentahydrat Reference substance Species LC50 Daphnia toxicity Species EC50 Duration of exposure 12.2. Persistence and degrat Biodegradability	informa rainbow t Coge s) te Copper s rainbow t C Daphnia C dability	trout (Oncorf ).03 )6 h sulphate trout (Oncorf ).11 magna ).2 18 h	nynchus mykiss) nynchus mykiss)	mg/l	
SECTION 12: Ecological 12.1. Toxicity Fish toxicity Species LC50 Duration of exposure Fish toxicity (Components Copper sulfate pentahydrat Reference substance Species LC50 Daphnia toxicity Species EC50 Duration of exposure 12.2. Persistence and degrat Biodegradability Remarks 12.6. Other adverse effects	informa rainbow t g s) te Copper s rainbow t Daphnia dability No data a	trout (Oncorf ).03 )6 h sulphate trout (Oncorf ).11 magna ).2 18 h	nynchus mykiss) nynchus mykiss)	mg/l	
Section 12: Ecological 12.1. Toxicity Fish toxicity Species LC50 Duration of exposure Fish toxicity (Components Copper sulfate pentahydrat Reference substance Species LC50 Daphnia toxicity Species EC50 Duration of exposure 12.2. Persistence and degrat Biodegradability Remarks	informa rainbow t c g s) te Copper s rainbow t C Daphnia C adability No data a	trout (Oncorf ).03 96 h sulphate trout (Oncorf ).11 magna ).2 18 h available.	nynchus mykiss) nynchus mykiss)	mg/l mg/l	
SECTION 12: Ecological 12.1. Toxicity Fish toxicity Species LC50 Duration of exposure Fish toxicity (Components Copper sulfate pentahydrat Reference substance Species LC50 Daphnia toxicity Species EC50 Duration of exposure 12.2. Persistence and degrat Biodegradability Remarks 12.6. Other adverse effects General information / ecol	informa rainbow t g s) te Copper s rainbow t Daphnia C dability No data a logy , ground wa	trout (Oncorf 0.03 06 h sulphate trout (Oncorf 0.11 magna 0.2 18 h available. ter, water bo	nynchus mykiss) nynchus mykiss)	mg/l mg/l	
SECTION 12: Ecological 12.1. Toxicity Fish toxicity Species LC50 Duration of exposure Fish toxicity (Components Copper sulfate pentahydrat Reference substance Species LC50 Daphnia toxicity Species EC50 Duration of exposure 12.2. Persistence and degrat Biodegradability Remarks 12.6. Other adverse effects General information / ecol Do not allow it to reach soil	informa rainbow t g s) te Copper s rainbow t Daphnia C dability No data a logy , ground wa onsidera	trout (Oncorf 0.03 06 h sulphate trout (Oncorf 0.11 magna 0.2 18 h available. ter, water bo	nynchus mykiss) nynchus mykiss)	mg/l mg/l	
SECTION 12: Ecological 12.1. Toxicity Fish toxicity Species LC50 Duration of exposure Fish toxicity (Components Copper sulfate pentahydrat Reference substance Species LC50 Daphnia toxicity Species EC50 Duration of exposure 12.2. Persistence and degrat Biodegradability Remarks 12.6. Other adverse effects General information / ecol Do not allow it to reach soil	informa rainbow t c g s) te Copper s rainbow t C Daphnia C d adability No data a logy , ground wa onsidera ods	trout (Oncorf 0.03 06 h sulphate trout (Oncorf 0.11 magna 0.2 18 h available. ter, water bo ations	nynchus mykiss) nynchus mykiss)	mg/l mg/l	



Trade name: Cupri sulfas pentahydr

Substance number: 063168

Version: 3 / CH Replaces Version: 2 / CH Date revised: 23.04.2019

Print date: 01.10.19

#### Disposal recommendations for packaging

Contaminated packaging should be emptied as far as possible and after appropriate cleansing may be taken for reuse.

## **SECTION 14: Transport information *****

	Land transport ADR/RID	Marine transport IMDG/GGVSee ***	Air transport ICAO/IATA ***
Tunnel restriction code	-		
14.1. UN number	3077	3077	3077
14.2. UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Copper sulfate pentahydrate)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Copper sulfate pentahydrate)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Copper sulfate pentahydrate)
14.3. Transport hazard class(es)	9	9	9
Label			
14.4. Packing group	ш	Ш	ш
Limited Quantity	5 kg		
Transport category	3		
14.5. Environmental hazards	×	Marine Pollutant	¥2
	ENVIRONMENTALLY HAZARDOUS		ENVIRONMENTALLY HAZARDOUS

## **SECTION 15: Regulatory information *****

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

#### Water Hazard Class (Germany) ***

• /
WGK 3
141
Derivation of WGK according to Annex 1 No. 5.2 AwSV

## SECTION 16: Other information

## Hazard statements listed in Chapter 3

H302	Harmful if swallowed.
H315	Causes skin irritation.



Trade name: Cupri sulfas pentahydr

	<b>,</b>	
Substance number: 063168	Version: 3 / CH	Date revised: 23.04.2019
	Replaces Version: 2 / CH	Print date: 01.10.19
H319	Causes serious eye irritation.	
H400	Very toxic to aquatic life.	
H410	Very toxic to aquatic life with long lasting effects.	

#### **CLP categories listed in Chapter 3**

Acute Tox. 4	Acute toxicity, Category 4
Aquatic Acute 1	Hazardous to the aquatic environment, acute, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment, chronic, Category 1
Eye Irrit. 2	Eye irritation, Category 2
Skin Irrit. 2	Skin irritation, Category 2

#### **Supplemental information**

Relevant changes compared with the previous version of the safety data sheet are marked with: *** This information is based on our present state of knowledge. However, it should not constitute a guarantee for any specific product properties and shall not establish a legally valid relationship.