



Trade name: Rgs Fehling R (Lösung I)

Substance number: 183500

Version: 1 / CH

Date revised: 11.05.12

Replaces Version: - / CH

Date of printing: 11.05.12

## 1. Identification of the substance/mixture and of the company/undertaking

### 1.1. Product identifier

Rgs Fehling R (Lösung I)

Item-No. 18350000

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

#### Use of the substance/preparation

Reagent for analyses

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

#### Address

Hänseler AG

Industriestrasse 35

9101 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

## 2. Hazards identification

### 2.1. Classification of the substance or mixture

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

Classification (Regulation (EC) No. 1272/2008)  
Aquatic Chronic 2 H411

#### Classification in accordance with EC directives

Classification N, R51/53

### 2.2. Label elements

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

#### Hazard pictograms



#### Hazard statements

H411 Toxic to aquatic life with long lasting effects.

#### Precautionary statements

P273 Avoid release to the environment.

P391 Collect spillage.

#### Labelling in accordance with EC directives 1999/45/EC and 67/548/EEC

The product is classified and labelled in accordance with EC directives/the relevant national laws.

#### Hazard symbols



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Dangerous for the  
environment**R phrases**

51/53

Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**S phrases**

60

This material and its container must be disposed of as hazardous waste.

**3. Composition/information on ingredients****Hazardous ingredients****Copper sulfate pentahydrate**

CAS No.	7758-99-8
EINECS no.	231-847-6
Concentration	>= 1 < 10 %
Classification	Xn, R22 Xi, R36/38 N, R50/53

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

Acute Tox. 4	H302
	H315
	H319
	H400
	H410

**4. First aid measures****4.1. Description of first aid measures****General information**

Remove contaminated clothing immediately and dispose of safely. Adhere to personal protective measures when giving first aid.

**After inhalation**

Ensure supply of fresh air. Summon a doctor immediately.

**After skin contact**

Wash immediately with plenty of water for several minutes. Consult a doctor if skin irritation persists.

**After eye contact**

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

**After ingestion**

Rinse out mouth and give plenty of water to drink. Do not induce vomiting. When swallowed seek medical aid immediately and show the physician the packaging or the label of the packaging.

**5. Firefighting measures****5.1. Extinguishing media**



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### **Suitable extinguishing media**

Extinguishing measures to suit surroundings

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

#### **Special protective equipment for fire-fighting**

Use self-contained breathing apparatus. Wear full protective suit.

#### **Other information**

Do not discharge into surface waters/groundwater.

## **6. Accidental release measures**

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

Ensure adequate ventilation. Use personal protective clothing. Do not inhale vapours. Avoid contact with eyes and skin.

### **6.2. Environmental precautions**

Dilute with lot of water. Do not discharge into the subsoil/soil. Do not discharge into the drains/surface waters/groundwater. Retain and dispose of contaminated wash water.

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

Pick up with absorbent material (eg sand, kieselgur, acid binder, universal binder, sawdust). Dispose of absorbed material in accordance with the regulations.

## **7. Handling and storage**

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

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

Provide good ventilation of working area (local exhaust ventilation if necessary). Avoid formation of aerosols.

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

No special measures necessary.

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

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

No special requirements.

#### **Hints on storage assembly**

Do not store together with foodstuffs.

#### **Further information on storage conditions**

Protect from light.

## **8. Exposure controls/personal protection**

### **8.1. Control parameters**

#### **Other information**

Contains no substances with occupational exposure limit values.

### **8.2. Exposure controls**

#### **Exposure controls**

See chapter 7. No measures exceeding the ones mentioned are necessary.

#### **General protective and hygiene measures**

At work do not eat, drink, smoke or take drugs. Keep away from food-stuffs, beverages and feed-stocks.



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Remove contaminated, soaked clothing immediately and dispose of safely. Wash hands before breaks and after work. Avoid contact with eyes and skin.

**Respiratory protection**

Breathing apparatus in the event of aerosol or mist formation. Breathing apparatus in the event of vapours.

**Hand protection**

Gloves

Appropriate Material

The glove material must be sufficient impermeable and resistant to the substance. Check the tightness before wear. Gloves should be well cleaned before being removed, then stored in a well ventilated location.

**Eye protection**

Tightly fitting safety glasses

**Body protection**

Clothing as usual in the chemical industry.

**9. Physical and chemical properties****9.1. Information on basic physical and chemical properties**

<b>Form</b>	liquid		
<b>Colour</b>	blue		
<b>Odour</b>	odourless		
<b>Flash point</b>			
Value	°C		
Remarks	Not applicable		
<b>Vapour pressure</b>			
Value	23		hPa
Temperature	20	°C	
<b>Density</b>			
Value	1.1		g/cm <sup>3</sup>
Temperature	20	°C	
<b>Solubility in water</b>			
Remarks	Completely miscible		

**9.2. Other information****Other information**

The product is not dangerous for explosions.

**10. Stability and reactivity****10.4. Conditions to avoid**

No decomposition if stored and applied as directed.

**11. Toxicological information****11.1. Information on toxicological effects****Acute oral toxicity**

Reference substance	Copper sulfate pentahydrate		
Species	rat		
LD50	960		mg/kg

**Acute dermal toxicity**



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Reference substance	Copper sulfate pentahydrate
Species	rat
LD50	> 2000 mg/kg

**Skin corrosion/irritation**

valuation	slightly irritant
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**Serious eye damage/irritation**

valuation	slightly irritant
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**Sensitization**

Remarks	Possibility of sensitization through skin contact.
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**Experience in practice**

After Swallowing: nausea. vomiting

**Other information**

Observe the usual precautions for handling chemicals.

**12. Ecological information****12.1. Toxicity****Fish toxicity**

Reference substance	Copper sulfate pentahydrate
Species	rainbow trout (Oncorhynchus mykiss)
LC50	0.11 mg/l
Duration of exposure	96 h
Remarks	Very toxic for fishes.

**Daphnia toxicity**

Reference substance	Copper sulfate pentahydrate
Species	Daphnia magna
EC50	0.2 mg/l
Duration of exposure	48 h

**12.6. Other adverse effects****General information / ecology**

Do not allow it to reach soil, ground water, water bodies or sewage system. Toxic for aquatic organisms. Product is highly hazardous to water.

**13. Disposal considerations****13.1. Waste treatment methods****Disposal recommendations for the product**

Disposal in compliance with local and national regulations.

Disposal in compliance with local and national regulations.

**Disposal recommendations for packaging**

Dispose of as unused product.

**14. Transport information****Land transport ADR/RID****14.1. UN number**

UN 3082

**14.2. UN proper shipping name**

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S

Danger releasing substance      Copper sulfate pentahydrate



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

Class 9

Label 9

**14.4. Packing group**

Packing group III

**14.5. Environmental hazards**

ENVIRONMENTALLY HAZARDOUS

**Marine transport IMDG/GGVSee****14.1. UN number**

UN 3082

**14.2. UN proper shipping name**

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S

Danger releasing substance Copper sulfate pentahydrate

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

Class 9

**14.4. Packing group**

Packing group III

**14.5. Environmental hazards**

Marine Pollutant

Environmental labelling ENVIRONMENTALLY HAZARDOUS

**Air transport ICAO/IATA****14.1. UN number**

UN 3082

**14.2. UN proper shipping name**

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S

Danger releasing substance Copper sulfate pentahydrate

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

Class 9

**14.4. Packing group**

Packing group III

**14.5. Environmental hazards**

ENVIRONMENTALLY HAZARDOUS

**15. Regulatory information****16. Other information****R-phrases listed in chapter 3**

22	Harmful if swallowed.
36/38	Irritating to eyes and skin.
50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**Hazard statements listed in chapter 3**

H302	Harmful if swallowed.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

**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.