

Safety data sheet

according to Regulation (EC) No. 1907/2006

Schliessmann Schwäbisch Hall

Date: 11.01.2016

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

1.1 Product identifier

Product name: Rebelein-Reagenz „ZUCKER 1“ / Rebelein „SUGAR 1“
Article: 0025 f.
Chemical name: -
Chemical name: Aqueous solution of copper-II-sulfate pentahydrate and sulphuric acid
Registration number: See section 3 for substances contained in the mixture

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

Reagent for the analysis of beverages

1.3 Details of the supplier of the safety data sheet

Company: C. Schliessmann Kellerei-Chemie GmbH & Co KG
Auwiesenstr. 5, D-74523 Schwäbisch Hall
Tel. 0049-(0)791 / 97191 -0, Fax -25
E-Mail: service@c-schliessmann.de

1.4 Emergency telephone number

Poison centre Freiburg: Tel. 0049-(0)761 / 19240

2. Hazards identification

2.1 Classification of the substance or mixture

Met. Corr. 1 H290 Kann gegenüber Metallen korrosiv sein.
Aquatic Chronic 1 H410 Very toxic to aquatic life with long lasting effects.

2.2 Label elements according to Regulation (EC) No 1272/2008

Hazard pictograms:



Signal word:

WARNING

Hazardous component:

copper-II-sulphate pentahydrate, sulphuric acid

Hazard statements:

H290
H410

May be corrosive to metals.
Very toxic to aquatic life with long lasting effects.

Precautionary statements:

P273
P305+P351+P338
P501

Avoid release to the environment.
IF IN EYES: Rinse cautiously with water for several minutes.
Remove contact lenses, if present and easy to do. Continue rinsing.
Dispose according local regulations.

2.3 Other hazards

Harmful if swallowed. Causes eye irritation.

3. Composition/information on ingredients

3.1 Substance

The product is a mixture.

3.2 Mixtures

Mixture of substances listed below with water.

Dangerous component:

copper-II-sulphate pentahydrate

EC Number:	231-847-6
CAS:	7758-99-8
Reg.nr.:	01-2119520566-40
Classification:	Aquatic Acute 1 H400 Very toxic to aquatic life. Aquatic Chronic 1 H410 Very toxic to aquatic life with long lasting effects. Acute Tox. 4 H302 Harmful if swallowed. Skin Irrit. 2 H315 Causes skin irritation. Eye Irrit. 2 H319 Causes serious eye irritation.
Content:	< 5 %
Dangerous component:	sulphuric acid
EC Number:	231-639-5
CAS:	7664-93-9
Reg.nr.:	01-2119458838-20-0019
Classification:	Met. Corr. 1 H290 May be corrosive to metals. Skin Corr. 1A H314 Causes severe skin burns and eye damage.
Content:	< 0,5 %

4. First aid measures

4.1 Description of first aid measures

After inhalation:	Supply fresh air.
After skin contact:	Wash with water and soap.
After eye contact:	Rinse opened eye for 10 minutes under running water. Then consult a doctor.
After swallowing:	Rinse out mouth and drink a glass of water. Call for a doctor immediately.

4.2 Most important symptoms and effects, both acute and delayed

After inhalation:	Contact with mucous membranes causes irritations.
After skin contact:	Slight irritations possible.
After eye contact:	Irritations, risk of corneal damage.
After swallowing:	Irritations. Gastric pain, vomiting, diarrhoea, drop in blood pressure, tachycardia.

4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

5. Firefighting measures

5.0 Combustibility	The product is not combustible.
5.1 Suitable extinguishing agents	Adapted to the environmental fire. CO ₂ , powder or waterspray
5.2 Special hazards arising from the substance or mixture	Risk of hazardous vapours and toxic fumes in fire (sulphur oxides).
5.3 Advice for firefighters	Wear self-contained respiratory protective device. Avoid skin contact.

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Wear appropriate protective clothing. Don't breathe aerosols and fumes.

6.2 Environmental precautions

Dilute with plenty of water. Do not allow to enter sewers/ground water or penetrate the soil.

6.3 Methods and material for containment and cleaning up

Absorb spilled product on an inert absorbent and arrange removal by disposal company. Clean site of spillage thoroughly with water.

6.4 Reference to other sections

See Section 13 for disposal information.

7. Handling and storage

7.1 Precautions for safe handling

Avoid contact with skin and eyes.

- 7.2 Conditions for safe storage, including any incompatibilities** Keep well closed at 15-25°C, not in metal tins or containers.
- 7.3 Specific end use(s)** See section 1.2

8. Exposure controls/personal protection

8.1 Control parameters

WEL (Great Britain): Long-term value copper sulphate: 1 mg/m³

8.2 Exposure controls

Personal protective equipment:

Respiratory protection:

Suitable respiratory equipment when vapours/aerosols are generated.

Eye protection:

Safety glasses with side-shields or face-shield.

Skin protection:

Rubber or plastic gloves.

General hygiene considerations:

In accordance with good industrial hygiene and safety practices. Application of skin-protective barrier cream recommended. Wash hands after working with substance.

9. Physical and chemical properties

Physical state:	Liquid
Colour:	Light blue
Odour:	Odourless
pH-value:	2 (20°C)
Melting temperature:	Not available
Boiling temperature:	Not available
Ignition temperature:	Not applicable
Flash point:	Not applicable
Danger of explosion:	No explosion hazard
Vapour pressure:	Not available
Density:	1,03 g/cm ³ (20°C)
Solubility in water:	Unlimited

10. Stability and reactivity

10.1 Reactivity

Has a corrosive effect.

10.2 Chemical stability

No decomposition if used and stored according to specifications.

10.3 Possibility of hazardous reactions

None

10.4 Conditions to avoid

No information available.

10.5 Incompatible materials

Various metals

10.6 Hazardous decomposition products

In case of fire: see section 5.

11. Toxicological information

11.1 Information on toxicological effects

Acute toxicity (copper sulphate):

LD50 (oral, rat): 960 mg/kg

Subacute/chronic toxicity:

No sensitizing effects known.

CMR effects:

Mutagenicity:

Ames-test and tests with mammalian cells didn't show mutagenic or teratogenic effects.

Carcinogenicity:

No classification as carcinogenic toxicant.

Reproductive toxicity:

No classification as reproductive toxicant.

11.2 Further information

See section 4 for symptoms after direct contact with the product

12. Ecological information

All Informations refer to: copper sulphate

12.1 Aquatic toxicity	LC50 (96h) 0,1 mg/l (rainbow trout); may cause long-term adverse effects in the aquatic environment
12.2 Persistence and degradability	Not applicable.
12.3 Bioaccumulative potential	No further relevant information available.
12.4 Mobility in soil	No further relevant information available.
12.5 Results of PBT and vPvB assessment	Not applicable.
12.6 Other adverse effects	No further relevant information available.

13. Disposal considerations

Product must be disposed of as hazardous waste. Disposal according to official regulations. Our infosheet "Information on the working equipment for analysis methods according to Dr. Rebelein." describes the diminuation of the volumes of hazardous wastes.

14. Transport information

14.1 UN-Number

ADR, IMDG, IATA: UN3264

14.2 UN proper shipping name

ADR: 3264 CORROSIVE LIQUID; ACIDIC; INORGANIC; N.O.S.
(SULPHURIC ACID)

IMDG, IATA: CORROSIVE LIQUID; ACIDIC; INORGANIC; N.O.S. (SULPHURIC ACID)

14.3 Transport hazard class(es)

ADR: Class 8 / Corrosive substances, Label 8
classification code C1

IMDG: Transport category 3 / LQ7 / 5 L

Class 8 / Corrosive substances, Label 8
EmS: F-A S-B

IATA: Class 8 / Corrosive substances, Label 8

14.4 Packing group

ADR, IMDG, IATA: III

14.5 Environmental hazards

Marine pollutant: Yes

15. Regulatory information

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

Information about limitation of use: Employment restrictions concerning juveniles must be observed.

Waterhazard class: 2 (hazardous for water)

16. Other information

The informations provided on this SDS are correct to the best of our knowledge and information. These informations are designed as a guide for safe handling. They are no guarantee for specific characteristics of the product.