

Trade name: Zinci sulfas heptahydricus

Substance number: 068648 Version: 1 / CH Date revised: 13.01.12

Replaces Version: - / CH Date of printing: 20.08.12

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

1.1. Product identifier

Zinci sulfas heptahydricus

Item-No. 06864800

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)

Acute Tox. 4 H302 Eye Dam. 1 H318 Aquatic Acute 1 H400 Aquatic Chronic 1 H410

Classification in accordance with EC directives

Classification Xn. R22

Xi, R41 N, R50/53

2.2. Label elements

Labelling according to regulation (EC) No 1272/2008

Hazard pictograms



Signal Word

Danger

Hazard statements

H302 Harmful if swallowed.

H318 Causes serious eye damage.

H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements

P261.1 Avoid breathing dust.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact

lenses, if present and easy to do. Continue rinsing.



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P313 Get medical advice/attention.

P280 Wear protective gloves/protective clothing/eye protection/face protection.
P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

P273 Avoid release to the environment.

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





Dangerous for the environment

R phrases

22 Harmful if swallowed.

41 Risk of serious damage to eyes.

50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the

aquatic environment.

S phrases

22 Do not breathe dust.

26 In case of contact with eyes, rinse immediately with plenty of water and seek

medical advice.

Wear eye/face protection.

46 If swallowed, seek medical advice immediately and show this container or label.

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

Avoid release to the environment. Refer to special instructions/Safety data

sheets.

Hazardous component(s) to be indicated on label

contains Zinc sulphate (hydrous) (mono-, hexa- and hepta hydrate)

3. Composition/information on ingredients

Substance / product identification

CAS-Nr. 7446-20-0

Hazardous ingredients

Zinc sulphate (hydrous) (mono-, hexa- and hepta hydrate)

CAS No. 7446-19-7 EINECS no. 231-793-3

Concentration

Classification

>= 50 % Xn, R22

Xi, R41 N, R50/53

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

Acute Tox. 4 H302 Eye Dam. 1 H318 Aquatic Acute 1 H400 Aquatic Chronic 1 H410

4. First aid measures



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4.1. Description of first aid measures

After inhalation

Ensure supply of fresh air.

After skin contact

In case of contact with skin wash off immediately with plenty of water. Remove contaminated, soaked clothing immediately and dispose of safely.

After eye contact

In case of contact with the eyes, rinse immediately for at least 15 minutes with plenty of water. Summon a doctor immediately.

After ingestion

Rinse out mouth and give plenty of water to drink. Summon a doctor immediately.

5. Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Product itself is non-combustible; adapt fire extinguishing measures to surrounding areas.

5.2. Special hazards arising from the substance or mixture

The product is not combustible. In case of combustion evolution of dangerous gases possible. Sulphur oxides

5.3. Advice for firefighters

Special protective equipment for fire-fighting

Use self-contained breathing apparatus.

Other information

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

6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Avoid dust formation. Do not inhale dust.

6.2. Environmental precautions

Do not allow to enter drains.

6.3. Methods and material for containment and cleaning up

To pick up dry. When picked up, treat material as prescribed under heading "Disposal". Clean up affected area.

7. Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

No special requirements.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep tightly closed in a dry and cool place.

8. Exposure controls/personal protection



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8.2. Exposure controls

General protective and hygiene measures

Remove contaminated, soaked clothing immediately and dispose of safely. Wash hands and face after work. Preventative skin protection.

6

Respiratory protection

Use breathing apparatus in dust/fumes/mist-laden atmosphere. Particle filter P2

Hand protection

Not suitable: gloves of nitrile rubber - NBR

Eye protection

necessary

9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Form solid

Colour colourless to white

Odour odourless

pН

Value appr. 4 to Concentration/H2O 50 g/l Temperature 20 $^{\circ}$

Melting point

Value 100 ℃

Boiling point

Remarks Not applicable

Flash point

Remarks Not applicable

Vapour pressure

Remarks Not applicable

Density

Value 1.97 g/cm³ Temperature 20 $^{\circ}$

Solubility in water

Value 965 g/l Temperature 20 $^{\circ}$

Thermal decomposition

Value 39 to 280 ${\mathfrak C}$ Remarks Loss of crystal water.

Value - to 600 ℃

9.2. Other information

Bulk density

Value appr. 800 to 1000 kg/m³

10. Stability and reactivity

10.4. Conditions to avoid

Thermal decomposition



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Value 39 to 280 ℃

Remarks Loss of crystal water.

Value - to 600 ℃

11. Toxicological information

11.1. Information on toxicological effects

Acute oral toxicity

Species rat

LD50 1260 mg/kg

Experience in practice

Damage to the lungs possible.

Other information

Observe the usual precautions for handling chemicals.

12. Ecological information

12.1. Toxicity

Fish toxicity

Species rainbow trout (Oncorhynchus mykiss)
LC50 0.43 mg/l
Duration of exposure 96 h

12.6. Other adverse effects

General information / ecology

Do not allow it to reach soil, ground water, water bodies or sewage system.

13. Disposal considerations

13.1. Waste treatment methods

Disposal recommendations for the product

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 3077

14.2. UN proper shipping name

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S

Danger releasing substance Zinc sulphate (hydrous) (mono-, hexa- and hepta hydrate)

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



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ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S

Danger releasing substance Zinc sulphate (hydrous) (mono-, hexa- and hepta hydrate)

14.3. Transport hazard class(es)

Class 9

14.4. Packing group

Packing group III

Environmental labelling ENVIRONMENTALLY HAZARDOUS

Air transport ICAO/IATA

14.1. UN number

UN 3077

14.2. UN proper shipping name

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S

Danger releasing substance Zinc sulphate (hydrous) (mono-, hexa- and hepta hydrate)

14.3. Transport hazard class(es)

Class 9

14.4. Packing group

Packing group III

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS

15. Regulatory information

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

Other regulations, restrictions and prohibition regulations

Observe employment restrictions for young people.

Observe employment restrictions for child bearing mothers and nursing mothers.

16. Other information

R-phrases listed in chapter 3

22 Harmful if swallowed.

41 Risk of serious damage to eyes.

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.

H318 Causes serious eye damage.
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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.