

Trade name: Acid sulfuricum 95%

Substance number: 206375 Version: 4 / CH Date revised: 23.04.2019

Replaces Version: 3 / CH Print date: 23.04.19

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

# 1.1. Product identifier

Acid sulfuricum 95%

Item No. 20637500

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

# Use of the substance/preparation

Chemical

# 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)

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Skin Corr. 1A H314 Eye Dam. 1 H318

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



## Signal word

Danger

#### **Hazard statements**

H314 Causes severe skin burns and eye damage.

# Precautionary statements \*\*\*

P281 Use personal protective equipment as required.

P260.2 Do not breathe vapours/aerosol.

P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P302+P352 IF ON SKIN: Wash with plenty of soap and water.



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P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position

comfortable for breathing.

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

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

P308+P313 IF expsoed or concerned: Get medicinal advice/attention.

Hazardous component(s) to be indicated on label (Regulation (EC) No. 1272/2008)

contains Sulphuric acid

# **SECTION 3: Composition/information on ingredients**

# Hazardous ingredients

#### Sulphuric acid

CAS No. 7664-93-9 EINECS no. 231-639-5

Concentration >= 50 %

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

Skin Corr. 1A H314

Concentration limits (Regulation (EC) No. 1272/2008)

Eye Irrit. 2 H319 >= 5 < 15 Skin Corr. 1A H314 >= 15 Skin Irrit. 2 H315 >= 5 < 15

CLP Regulation (EC) No 1272/2008, Annex VI, Note B

DSD Directive 67/548/EEC, Annex I, Note B

# **SECTION 4: First aid measures**

# 4.1. Description of first aid measures

#### **General information**

Remove contaminated, soaked clothing immediately and dispose of safely.

#### After inhalation

Remove the casualty into fresh air and keep him calm. Irregular breathing/no breathing: artificial respiration. Summon a doctor immediately.

#### After skin contact

Affected skin should first be dabbed with cotton wool, then washed with plenty of water and a mild cleanser. After contact with skin, wash immediately with plenty of water. Summon a doctor immediately.

#### After eve contact

Separate eyelids, wash the eyes thoroughly with water (15 min.). Summon a doctor immediately.

#### After ingestion

Rinse out mouth and give plenty of water to drink. Never give anything by mouth to an unconscious person. Do not induce vomiting. Summon a doctor immediately.

# 4.3. Indication of any immediate medical attention and special treatment needed Hints for the physician / treatment

Treat symptomatically

# SECTION 5: Firefighting measures

# 5.1. Extinguishing media

## Suitable extinguishing media

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



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

Developpment of toxic gases; In the event of fire the following can be released: Sulfuroxides (SOx)

# 5.3. Advice for firefighters

## Special protective equipment for fire-fighting

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

#### Other information

Collect contaminated fire-fighting water separately, must not be discharged into the drains. Cool endangered containers with water spray jet.

# **SECTION 6: Accidental release measures**

# 6.1. Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Ensure adequate ventilation. Avoid contact with eyes and skin. Do not inhale vapours.

# 6.2. Environmental precautions

Do not discharge into the drains/surface waters/groundwater. Advise water authority if spillage has entered water course or drainage system. In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

# 6.3. Methods and material for containment and cleaning up

Neutralise with: milk of lime. Rinse away rest with plenty of water. When picked up, treat material as prescribed under Section 13 "Disposal". Pick up with absorbent material (eg sand, kieselgur, acid binder, universal binder). Send in suitable containers for recovery or disposal.

# **SECTION 7: Handling and storage**

### 7.1. Precautions for safe handling

#### Advice on safe handling

Keep container tightly closed. Wear protective equipment. Avoid inhaling dusts/ billows/ steams. Avoid contact with skin and eyes. When diluting, always stir product into water. Smoking, eating and drinking should be prohibited in application area. No special requirements. Avoid inhaling dusts/ billows/ steams.

#### Advice on protection against fire and explosion

The product is not combustible.

# 7.2. Conditions for safe storage, including any incompatibilities

#### Requirements for storage rooms and vessels

Provide acid-resistant floor. Keep only in original packaging.

#### Hints on storage assembly

Do not store together with animal feedstocks. Do not store together with foodstuffs. Do not store with combustible materials.

#### Storage classes

Storage class according to TRGS 510 8B Non-combustible corrosive hazardous

substances

Storage category (Switzerland) 8 Caustic and corrosive substances

#### Further information on storage conditions

Keep container tightly closed, cool and dry. Keep container in a well-ventilated place. Product is hygroscopic.

# **SECTION 8: Exposure controls/personal protection**



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# 8.1. Control parameters

# **Exposure limit values**

Sulphuric acid

List SUVA Type MAK

Value 0,1 mg/m³
Short term exposure limit 0,1 mg/m³

Pregnancy group: S; Status: 2017; Remarks: SSc; LungeKT HU; DFG, NIOSH, OSHA

# 8.2. Exposure controls

#### General protective and hygiene measures

Keep away from food-stuffs, beverages and feed-stocks. Do not eat, drink or smoke during work time. Avoid contact with skin and eyes. Hold eye wash fountain available. Wash hands before breaks and after work. Remove contaminated, soaked clothing immediately and dispose of safely. Do not inhale vapours. Do not inhale mist.

## **Respiratory protection**

Breathing apparatus in the event of vapours. Breathing apparatus in the event of aerosol or mist formation. combination filter E-P2

# **Hand protection**

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.

Appropriate Material Fluoro carbon rubber - FKM Material thickness 0.5 mm

Breakthrough time >= 8 h

Appropriate Material Butyl rubber - Butyl Material thickness 0.5 mm

Breakthrough time >= 2 h

#### Eye protection

Tightly fitting safety glasses

#### **Body protection**

Acid-resistant protective clothing

# **SECTION 9: Physical and chemical properties**

# 9.1. Information on basic physical and chemical properties

Form liquid
Colour colourless
Odour odourless

pH value

Remarks acidic

**Melting point** 

Value appr. -15 °C Remarks undiluted product

Initial boiling point and boiling range

Value appr. 295 to 315 °C

Pressure 1.0130 hPa

Flash point

Remarks Not applicable

Flammability (solid, gas)



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Not self inflammable

Vapour pressure

Value 1 Pa

Temperature 20 °C

**Density** 

Value 1.84 g/cm<sup>3</sup>

Temperature 20 °C

Solubility in water

Remarks soluble Partition coefficient: n-octanol/water

Remarks Not applicable

Viscosity

dynamic

Value 21 mPa.s

kinematic

Remarks No data available

# **SECTION 10: Stability and reactivity**

## 10.1. Reactivity

Corrosive to metals.

# 10.2. Chemical stability

Stable until 300°C

#### 10.3. Possibility of hazardous reactions

Water

#### 10.4. Conditions to avoid

Protect from atmospheric moisture and water.

# 10.5. Incompatible materials

Reactions with metals, with evolution of hydrogen. Exothermic reaction with: Water, Reacts violently with: Bases, Water, Incompatible with: Organic materials, Bases, Reducing agents, Metals

# 10.6. Hazardous decomposition products

sulphurous oxides (SOx)

# **SECTION 11: Toxicological information**

# 11.1. Information on toxicological effects

# **Acute oral toxicity (Components)**

Sulphuric acid

Species rat

LD50 2140 mg/kg

Remarks Ingestion causes burns of the upper digestive and respiratory tracts.

# **Acute inhalative toxicity (Components)**

Sulphuric acid

Species rat

LC50 375 mg/m³

Duration of exposure 4 h

Method OECD 403



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#### Skin corrosion/irritation

Species rabbit

evaluation strongly corrosive

# Serious eye damage/irritation

Species rabbit

evaluation strongly corrosive

Remarks Risk of serious damage to eyes.

Sensitization

Remarks No sensitation effect known.

## **Experience in practice**

Ingestion of aqueous solution causes burns in: Mouth. Throat. Perforation of gullet and stomach.

# **SECTION 12: Ecological information**

# 12.1. Toxicity

# Fish toxicity (Components)

## Sulphuric acid

Species Bluegill (Lepomis macrochirus)

LC50 16 to 28 mg/l

Duration of exposure 96 h

# **Daphnia toxicity (Components)**

#### Sulphuric acid

Species Daphnia magna

EC50 > 100 mg/l

Duration of exposure 48 h

Method OECD 202

# **Algae toxicity (Components)**

#### Sulphuric acid

Species Desmodesmus subspicatus

IC50 > 100 mg/l

Duration of exposure 72 h

Method OECD 201

# 12.2. Persistence and degradability

# **Biodegradability**

Remarks Not applicable.

# 12.3. Bioaccumulative potential

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

Remarks Not applicable

# 12.6. Other adverse effects

#### General information / ecology

Harmful to aquatic organisms. Neutralization is normally necessary before waste water is discharged into water treatment plants. Do not allow it to reach soil, ground water, water bodies or sewage system.

# **SECTION 13: Disposal considerations**

## 13.1. Waste treatment methods

# Disposal recommendations for the product

EWC waste code No not dispose with rubbish.



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EWC waste code

Should not be released into the sanitary sewer system.

Disposal in compliance with local and national regulations.

# Disposal recommendations for packaging

EWC waste code Should not be released into the sanitary sewer system.

Contaminated packaging should be emptied as far as possible and after appropriate cleansing may be

taken for reuse.

Disposal in compliance with local and national regulations.

# **SECTION 14: Transport information**

|                                  | Land transport ADR/RID   | Marine transport<br>IMDG/GGVSee | Air transport<br>ICAO/IATA |
|----------------------------------|--------------------------|---------------------------------|----------------------------|
| Tunnel restriction code          | E                        |                                 |                            |
| 14.1. UN number                  | 1830                     | 1830                            | 1830                       |
| 14.2. UN proper shipping name    | SULPHURIC ACID, Solution | SULPHURIC ACID, Solution        | SULPHURIC ACID, Solution   |
| 14.3. Transport hazard class(es) | 8                        | 8                               | 8                          |
| Label                            | 8                        | 8                               | 8                          |
| 14.4. Packing group              | II                       | II                              | II                         |
| Limited Quantity                 | 11                       |                                 |                            |
| Transport category               | 2                        |                                 |                            |

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

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

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

Water Hazard Class WGK 1

(Germany)

Identification number 182

Remarks Derivation of WGK according to Annex 1 No. 5.2 AwSV

# 15.2. Chemical safety assessment

For this substance a chemical safety assessment has been carried out.

# **SECTION 16: Other information**

# Hazard statements listed in Chapter 3

H314 Causes severe skin burns and eye damage.

# CLP categories listed in Chapter 3

Skin Corr. 1A Skin corrosion, Category 1A

#### Supplemental information



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Date revised: 23.04.2019 Replaces Version: 3 / CH 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.