

Trade name: Acid sulfuricum 94%

Substance number: 206250

Version: 7 / CH

Date revised: 09.05.2023

Replaces Version: 6 / CH

Print date: 09.05.23

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

1.1. Product identifier

Acid sulfuricum 94%

Item No. 20625000

Registration no.

EC No.: 231-639-5

Registration no. 01-2119458838-20-XXXX

CAS No. 7664-93-9

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)

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 ***

P264.1 Wash hands thoroughly after handling.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

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

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P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P310 Immediately call a POISON CENTER or doctor.
 P501.3 Disposal in compliance with local and national regulations.

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

contains *** sulphuric acid ... %

2.3. Other hazards

The Substance does not meet PBT-criteria. This substance does not meet the vPvB-criteria. This substance does not have endocrine disrupting properties with respect to humans. This substance does not have endocrine disrupting properties with respect to non-target organisms.

SECTION 3: Composition/information on ingredients *****Hazardous ingredients *******sulphuric acid ... %**

| | | |
|--|-----------------------|------|
| CAS No. | 7664-93-9 | |
| EINECS no. | 231-639-5 | |
| Registration no. | 01-2119458838-20-XXXX | |
| 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 % |

Additional remarks:

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

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

Remove affected person from danger area, lay him down. Adhere to personal protective measures when giving first aid. Remove contaminated, soaked clothing immediately and dispose of safely.

After inhalation

If the patient is likely to become unconscious, place and transport in stable sideways position.

After skin contact

Wash off immediately with soap and water and rinse well. Summon a doctor immediately.

After eye contact

Shield unaffected eye. Separate eyelids, wash the eyes thoroughly with water (15 min.). Take medical treatment.

After ingestion

Rinse out mouth and give plenty of water to drink. No trials on neutralisation. Take affected person to fresh air. Summon a doctor immediately.

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

Irritating to respiratory system. Irritation of mucosa, Chemical burn, Gastrointestinal complaints, bleeding vomiting

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

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Frequent and persistent contact with the skin can cause dermatitis. Risk of stomach perforation

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

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

Non suitable extinguishing media

Full water jet

5.2. Special hazards arising from the substance or mixture

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

5.3. Advice for firefighters

Special protective equipment for fire-fighting

Use self-contained breathing apparatus. Wear full protective suit. Cool closed containers exposed to fire with water. Do not allow run-off from fire fighting to enter drains or water courses.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep away unprotected persons. Forms slippery surfaces with water. Ensure adequate ventilation. Avoid contact with eyes and skin. Do not inhale vapours.

6.2. Environmental precautions

Dilute with lot of water. Do not discharge into the drains/surface waters/groundwater.

6.3. Methods and material for containment and cleaning up

Take up with absorbent material (eg sand, kieselguhr, universal binder). Clean up affected area. When picked up, treat material as prescribed under Section 13 "Disposal". Ensure adequate ventilation.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Keep container tightly closed. Ensure adequate ventilation. Avoid contact with skin, eyes and clothing. Avoid inhalation of vapour and spray mist. Wear respiratory protection when spraying. When diluting, always stir product into water. Smoking, eating and drinking should be prohibited in application area. Wear protective equipment

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. Polyethylene. Polypropylene. Do not use metal containers and metal pinings. Keep only in original packaging.

Hints on storage assembly

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

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

SECTION 8: Exposure controls/personal protection ***

8.1. Control parameters

Exposure limit values ***

sulphuric acid ... %

| | | |
|--|------|-------------------|
| List | SUVA | |
| Type | MAK | |
| Value | 0,1 | mg/m ³ |
| Short term exposure limit | 0,2 | mg/m ³ |
| Pregnancy group: S; Remarks: C1#A SSc; Lunge; IFA NIOSH OSHA | | |

Derived No/Minimal Effect Levels (DNEL/DMEL)

sulphuric acid ... %

| | | |
|----------------------|--------------------------------|-------------------|
| Type of value | Derived No Effect Level (DNEL) | |
| Reference group | Worker | |
| Duration of exposure | Acute | |
| Route of exposure | inhalative | |
| Mode of action | Local effects | |
| Concentration | 0.1 | mg/m ³ |

| | | |
|----------------------|--------------------------------|-------------------|
| Type of value | Derived No Effect Level (DNEL) | |
| Reference group | Worker | |
| Duration of exposure | Long term | |
| Route of exposure | inhalative | |
| Mode of action | Local effects | |
| Concentration | 0.05 | mg/m ³ |

Predicted No Effect Concentration (PNEC)

sulphuric acid ... %

| | | |
|---------------|------------------------------|-------|
| Type of value | PNEC | |
| Type | Freshwater | |
| Concentration | 0.0025 | mg/l |
| Type of value | PNEC | |
| Type | Saltwater | |
| Concentration | 0.00025 | mg/l |
| Type of value | PNEC | |
| Type | Sediment | |
| Concentration | 0.002 | mg/kg |
| Type of value | PNEC | |
| Type | Marine sediment | |
| Concentration | 0.002 | mg/kg |
| Type of value | PNEC | |
| Type | Sewage treatment plant (STP) | |
| Concentration | 8.8 | mg/l |

8.2. Exposure controls

General protective and hygiene measures

Hold eye wash fountain available. At work do not eat, drink, smoke or take drugs. Keep away from food-

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

Respiratory protection

Short term: filter apparatus, combination filter B-P3; EN 141; At intensive and longer exposition use self-contained breathing apparatus.

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 | 0.4 | mm |
|--------------------|-----|----|

| | | |
|-------------------|---|---|
| Breakthrough time | 8 | h |
|-------------------|---|---|

| | |
|----------------------|----------------------|
| Appropriate Material | Butyl rubber - Butyl |
|----------------------|----------------------|

| | | |
|--------------------|-----|----|
| Material thickness | 0.5 | mm |
|--------------------|-----|----|

| | | |
|-------------------|------|---|
| Breakthrough time | >= 2 | h |
|-------------------|------|---|

Hand protection must comply with EN 374.

Eye protection

Tightly fitting safety glasses; Face shield

Body protection

Impermeable protective clothing

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

| | |
|-----------------------|--------|
| Physical state | liquid |
|-----------------------|--------|

| | |
|---------------|-------------------|
| Colour | almost colourless |
|---------------|-------------------|

| | |
|--------------|-----------|
| Odour | odourless |
|--------------|-----------|

Boiling point or initial boiling point and boiling range

| | | |
|-------|-----------|----|
| Value | appr. 310 | °C |
|-------|-----------|----|

| | | |
|----------|------|-----|
| Pressure | 1013 | hPa |
|----------|------|-----|

Flash point

| | |
|-------|----|
| Value | °C |
|-------|----|

| | |
|---------|----------------|
| Remarks | Not applicable |
|---------|----------------|

pH value

| | | | |
|-------|------|----|----|
| Value | -1.3 | to | -1 |
|-------|------|----|----|

Viscosity**dynamic**

| | | |
|-------|------------|-------|
| Value | appr. 22.5 | mPa.s |
|-------|------------|-------|

| | | |
|-------------|----|----|
| Temperature | 20 | °C |
|-------------|----|----|

Vapour pressure

| | | |
|-------|---------|-----|
| Value | < 0.001 | hPa |
|-------|---------|-----|

| | | |
|-------------|----|----|
| Temperature | 20 | °C |
|-------------|----|----|

Density and/or relative density

| | | |
|-------|------|-------------------|
| Value | 1.84 | g/cm ³ |
|-------|------|-------------------|

| | |
|--------|-----------|
| Method | DIN 51757 |
|--------|-----------|

9.2. Other information**Solubility in water**

| | |
|---------|--------------------|
| Remarks | completely soluble |
|---------|--------------------|

Oxidising properties

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evaluation

oxidizing

Other information

The product is not dangerous for explosions.

SECTION 10: Stability and reactivity**10.1. Reactivity**

Reacts violently with water.

10.2. Chemical stability

No decomposition if stored and applied as directed.

10.3. Possibility of hazardous reactions

Water

10.4. Conditions to avoid

Water. To avoid thermal decomposition, do not overheat.

10.5. Incompatible materials

Water, Addition of water leads to increase in temperature. Partly very violent reactions with bases and numerous organic classes of substances such as alcohols and amines. Reactions with metals, with evolution of hydrogen. Explosive, Violent reaction with organic compounds like wood, paper, grease.

10.6. Hazardous decomposition productsCorrosive gases/vapours, sulphurous oxides (SO_x)**Other information**

When diluting, add acids to water, never the other way around.

SECTION 11: Toxicological information *****11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008****Acute oral toxicity (Components)****sulphuric acid ... %**

| | | | |
|---------|---|------|-------|
| Species | rat | | |
| LD50 | | 2140 | mg/kg |
| Remarks | Ingestion causes burns of the upper digestive and respiratory tracts. | | |

Acute dermal toxicity (Components)**sulphuric acid ... %**

Remarks No data available.

Acute inhalative toxicity (Components)**sulphuric acid ... %**

| | | | |
|----------------------|----------|-----|-------------------|
| Species | rat | | |
| LC50 | | 375 | mg/m ³ |
| Duration of exposure | | 4 | h |
| Method | OECD 403 | | |

Skin corrosion/irritation (Components)**sulphuric acid ... %**

evaluation strongly corrosive

Serious eye damage/irritation (Components)**sulphuric acid ... %**

| | |
|------------|---------------------------------|
| evaluation | strongly corrosive |
| Remarks | Risk of serious damage to eyes. |

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Sensitization (Components)

sulphuric acid ... %

Remarks No data available.

Mutagenicity (Components)

sulphuric acid ... %

Remarks Not documented.

Reproduction toxicity (Components)

sulphuric acid ... %

evaluation No negative effects

Carcinogenicity (Components)

sulphuric acid ... %

Remarks Not documented.

Specific Target Organ Toxicity (STOT) (Components)

sulphuric acid ... %

Single exposure

evaluation No indications of STOT effects are available.

sulphuric acid ... %

Repeated exposure

evaluation No indications of STOT effects are available.

11.2 Information on other hazards**Endocrine disrupting properties with respect to humans**

This substance does not have endocrine disrupting properties with respect to humans.

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 (<i>Lepomis macrochirus</i>) | | |
| LC50 | 16 | 28 | mg/l |
| Duration of exposure | 96 | h | |

sulphuric acid ... %

| | | | |
|----------------------|----------|---|------|
| LC50 | 794 | | mg/l |
| Duration of exposure | 24 | h | |
| Method | OECD 203 | | |

Daphnia toxicity (Components)

sulphuric acid ... %

| | | | |
|----------------------|---------------|---|------|
| Species | Daphnia magna | | |
| EC50 | > 100 | | mg/l |
| Duration of exposure | 48 | h | |
| Method | OECD 201 | | |

sulphuric acid ... %

| | | | |
|----------------------|---------------|---|------|
| Species | Daphnia magna | | |
| EC50 | 29 | | mg/l |
| Duration of exposure | 24 | h | |
| Method | ISO 6341 | | |

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Algae toxicity (Components)**sulphuric acid ... %**

| | | | |
|----------------------|-------------------------|-----|------|
| Species | Desmodesmus subspicatus | | |
| IC50 | > | 100 | mg/l |
| Duration of exposure | | 72 | h |
| Method | OECD 201 | | |

sulphuric acid ... %

| | | | |
|----------------------|----------|----|------|
| EC50 | > | 50 | mg/l |
| Duration of exposure | | 24 | h |
| Method | OECD 201 | | |

Bacteria toxicity (Components)**sulphuric acid ... %**

| | | | |
|----------------------|------------------|-----|------|
| Species | activated sludge | | |
| EC50 | | 58 | mg/l |
| Duration of exposure | | 120 | h |

12.2. Persistence and degradability**Biodegradability (Components)****sulphuric acid ... %**

Remarks Inorganic product, cannot be eliminated from the water by biological purification processes.

12.3. Bioaccumulative potential**General information**

Not applicable

12.4. Mobility in soil**General information**

Not applicable

12.5. Results of PBT and vPvB assessment**Results of PBT and vPvB assessment**

The Substance does not meet PBT-criteria.
This substance does not meet the vPvB-criteria.

12.6 Endocrine disrupting properties**Endocrine disrupting properties with respect to the environment**

This substance does not have endocrine disrupting properties with respect to non-target organisms.

12.7. 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 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.
Disposal in compliance with local and national regulations.
EWC waste code Should not be released into the sanitary sewer system.

Disposal recommendations for packaging

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Disposal in compliance with local and national regulations.

SECTION 14: Transport information

| | Land transport ADR/RID | Marine transport IMDG/GGVSee | Air transport 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 |  |  |  |
| 14.4. Packing group | II | II | II |
| Limited Quantity | 1 I | | |
| 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 (Germany) WGK 1

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

SECTION 16: Other information**Hazard statements listed in Chapter 3**

H314 Causes severe skin burns and eye damage.
H318 Causes serious eye damage.

CLP categories listed in Chapter 3

Eye Dam. 1 Serious eye damage, Category 1
Skin Corr. 1A Skin corrosion, Category 1A

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.