

# Sulfur standard 1.000g S/L HsSO4 in water for ICP - traceable to NIST

Revision date: 05.03.2025

Product code: 10362

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

## 1.1. Product identifier

Sulfur standard 1.000g S/L HsSO4 in water for ICP - traceable to NIST

UFI:

## DNPW-R0VH-3000-5GQQ

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

## Use of the substance/mixture

Laboratory chemicals

Industrial uses: Uses of substances as such or in preparations at industrial sites

Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

## Uses advised against

Do not use for private purposes (household).

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

Company name:	AnalytiChem GmbH	
	ACD	
Street:	Stempelstraße 6	
Place:	D-47167 Duisburg	
Telephone:	0203/5194-0	Telefax: 0203/5194-290
E-mail:	info@analytichem.de	
Contact person:	Abteilung Produktsicherheit	Telephone: 0203/5194-107/117
E-mail:	produktsicherheit@analytichem.de	
Internet:	www.analytichem.de	
Responsible Department:	Abteilung Produktsicherheit	
1.4. Emergency telephone	For Hazardous Materials [or Dangerous	Goods] Incidents Spill, Leak, Fire,
<u>number:</u>	Exposure, or Accident Call CHEMTREC Day or Night Within USA and Canada: 1-800-424-9300 Outside USA and Canada: +1 703-741-5970 (collect calls accepted)	

#### **Further Information**

This product is a mixture. REACH Registration Number see section 3.

# SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

## Regulation (EC) No 1272/2008 Met. Corr. 1; H290

Full text of hazard statements: see SECTION 16.

#### 2.2. Label elements

Pictograms:

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

Signal word:





H290

May be corrosive to metals.

#### Precautionary statements

P234	Keep only in original packaging.
P390	Absorb spillage to prevent material damage.



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P406

Store in a corrosion-resistant container with a resistant inner liner.

# 2.3. Other hazards

No data available

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

# 3.2. Mixtures

Chemical characterization Mixtures in aqueous solution

#### **Relevant ingredients**

none (according to Regulation (EC) No 1907/2006 (REACH))

#### **Further Information**

This product does not contain substances of very high concern according to Regulation (EC) No 1907/2006 (REACH), Article 57 above the respective regulatory concentration limit of = 0.1 % (w/w).

## **SECTION 4: First aid measures**

#### 4.1. Description of first aid measures

## **General information**

No data available

## After inhalation

Provide fresh air.

## After contact with skin

Wash immediately with: Water Take off immediately all contaminated clothing and wash it before reuse.

#### After contact with eyes

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist.

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

#### After ingestion

Rinse mouth immediately and drink plenty of water. Call a physician immediately.

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

Irritant

# 4.3. Indication of any immediate medical attention and special treatment needed

No data available

## **SECTION 5: Firefighting measures**

# 5.1. Extinguishing media

# Suitable extinguishing media

Co-ordinate fire-fighting measures to the fire surroundings.

# Unsuitable extinguishing media

no restriction

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

Non-combustible liquids Hazardous combustion products In case of fire may be liberated: Sulphur oxides

## 5.3. Advice for firefighters



# Safety Data Sheet

according to Regulation (EC) No 1907/2006

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In case of fire: Wear self-contained breathing apparatus.

#### Additional information

Suppress gases/vapours/mists with water spray jet.

## **SECTION 6: Accidental release measures**

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

General advice

#### Corrosive to metals.

#### For non-emergency personnel

Provide adequate ventilation. Use personal protection equipment. Avoid contact with skin, eyes and clothes. Remove persons to safety. Emergency procedures Consult an expert Do not breathe dust/fume/gas/mist/vapours/spray.

## For emergency responders

Precautionary statements For emergency responders : Personal protection equipment: see section 8

#### 6.2. Environmental precautions

Do not allow to enter into surface water or drains.

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

## For cleaning up

Clean contaminated articles and floor according to the environmental legislation.

#### Other information

Provide adequate ventilation. Do not breathe dust/fume/gas/mist/vapours/spray. Wear breathing apparatus if exposed to vapours/dusts/aerosols.

## 6.4. Reference to other sections

Safe handling: see section 7 Personal protection equipment: see section 8 Disposal: see section 13

## **SECTION 7: Handling and storage**

#### 7.1. Precautions for safe handling

## Advice on safe handling

Read label before use.

#### Advice on protection against fire and explosion

Usual measures for fire prevention.

#### Advice on general occupational hygiene

Keep away from food, drink and animal feedingstuffs. Remove contaminated, saturated clothing immediately. Draw up and observe skin protection programme. Wash hands and face before breaks and after work and take a shower if necessary. When using do not eat or drink. Avoid: aerosol or mist formation Do not breathe vapour/aerosol.

#### Further information on handling

Draw up and observe skin protection programme. Wash hands and face before breaks and after work and take a shower if necessary. Take off immediately all contaminated clothing and wash it before reuse.

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



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#### Requirements for storage rooms and vessels

Corrosive to metals.

Unsuitable container/equipment material: Metal, Light metal

The product develops hydrogen in an aqueous solution in contact with metals.

## Hints on joint storage

national regulations

Further information on storage conditions

Keep container tightly closed.

## 7.3. Specific end use(s)

Laboratory chemicals

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

## 8.1. Control parameters

## 8.2. Exposure controls

#### Appropriate engineering controls

Technical measures and the application of suitable work processes have priority over personal protection equipment.

If handled uncovered, arrangements with local exhaust ventilation have to be used.

## Individual protection measures, such as personal protective equipment

#### Eye/face protection

goggles

Wear eye/face protection.

## Hand protection

Protective gloves are recommended Company KCL GmbH, D-36124 Eichenzell, email: vertrieb@kcl.de With specification (test according to EN374):

By long-term hand contact Recommended glove articles: KCL 741 Dermatril® L Recommended material: NBR (Nitrile rubber) 0,11 mm Wearing time with permanent contact: > 480 min

By short-term hand contact Recommended glove articles: KCL 741 Dermatril® L Recommended material: NBR (Nitrile rubber) 0,11 mm Wearing time with occasional contact (splashes): > 480 min

The breakthrough times stated above were determined by KCL in laboratory tests acc. to EN374 with samples of the recommended glove types. This recommendation applies only to the product stated in the safety data sheet<(>,<)> supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de).

#### Skin protection

Wear suitable protective clothing. Take off immediately all contaminated clothing.

Wash hands before breaks and after work.

The choice of body protection depends on the concentration and quantity of hazardous substances. The chemical resistance of protective agents must be clarified with their suppliers.

#### **Respiratory protection**

Respiratory protection necessary at: aerosol or mist formation

The entrepeneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented.



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## **Environmental exposure controls**

Do not allow to enter into surface water or drains.

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

# 9.1. Information on basic physical and chemical properties

9.1. Information on basic physical and		
Physical state:	Liquid	
Colour: Odour:	colourless odourless	
0.000.00	odouriess	Ne data available
Melting point/freezing point:	d	No data available No data available
Boiling point or initial boiling point an boiling range:	d	
Flammability:		No data available
Lower explosion limits:		No data available
•		No data available
Upper explosion limits:		
Flash point:		No data available No data available
Auto-ignition temperature: Decomposition temperature:		No data available
pH-Value:		1-2
1		
Viscosity / kinematic:		No data available
Water solubility:		completely miscible
Solubility in other solvents No data available		
Partition coefficient n-octanol/water:		No data available
Vapour pressure:		No data available
Vapour pressure:		No data available
Density:		~1 g/cm <sup>3</sup>
Bulk density:		No data available
Relative vapour density:		No data available
9.2. Other information		
Information with regard to physical	hazard classes	
Information with regard to physical Explosive properties	l hazard classes	
Information with regard to physical Explosive properties No data available	I hazard classes	
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Explosive properties No data available	l hazard classes	No data available
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Explosive properties No data available Sustaining combustion: Self-ignition temperature Solid: Gas: Oxidizing properties Oxidizing <b>Other safety characteristics</b> Evaporation rate: Solvent separation test: Solvent separation test: Solvent content: Solid content: Sublimation point: Softening point: Pour point:	I hazard classes	No data available No data available
Explosive properties No data available Sustaining combustion: Self-ignition temperature Solid: Gas: Oxidizing properties Oxidizing Other safety characteristics Evaporation rate: Solvent separation test: Solvent separation test: Solvent content: Solid content: Sublimation point: Softening point: Pour point: No data available:	I hazard classes	No data available No data available
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Explosive properties No data available Sustaining combustion: Self-ignition temperature Solid: Gas: Oxidizing properties Oxidizing Other safety characteristics Evaporation rate: Solvent separation test: Solvent separation test: Solvent content: Solid content: Sublimation point: Softening point: Pour point: No data available:	I hazard classes	No data available No data available



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## **SECTION 10: Stability and reactivity**

#### 10.1. Reactivity

Corrosive to metals.

## 10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

#### 10.3. Possibility of hazardous reactions

Metal

The product develops hydrogen in an aqueous solution in contact with metals.

#### 10.4. Conditions to avoid

No data available

## 10.5. Incompatible materials

Cellulose Metal

The product develops hydrogen in an aqueous solution in contact with metals.

## 10.6. Hazardous decomposition products

In case of fire may be liberated: SECTION 5: Firefighting measures

#### **Further information**

No data available

## SECTION 11: Toxicological information

#### 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

## Toxicocinetics, metabolism and distribution

There are no data available on the preparation/mixture itself.

#### Acute toxicity

Based on available data, the classification criteria are not met.

#### ATEmix calculated

ATE (oral) > 2000 mg/kg; ATE (dermal) > 2000 mg/kg; ATE (inhalation vapour) > 20 mg/l; ATE (inhalation dust/mist) > 5 mg/l

#### Irritation and corrosivity

Skin corrosion/irritation: Based on available data, the classification criteria are not met.

Serious eye damage/eye irritation: Based on available data, the classification criteria are not met.

#### Sensitising effects

Based on available data, the classification criteria are not met.

#### Carcinogenic/mutagenic/toxic effects for reproduction

Germ cell mutagenicity: Based on available data, the classification criteria are not met. Carcinogenicity: Based on available data, the classification criteria are not met. Reproductive toxicity: Based on available data, the classification criteria are not met.

## STOT-single exposure

Based on available data, the classification criteria are not met.

## STOT-repeated exposure

Based on available data, the classification criteria are not met.

## Aspiration hazard

Based on available data, the classification criteria are not met.

#### Specific effects in experiment on an animal

There are no data available on the preparation/mixture itself.



# according to Regulation (EC) No 1907/2006 Sulfur standard 1.000g S/L HsSO4 in water for ICP - traceable to NIST

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## Additional information on tests

There are no data available on the preparation/mixture itself.

#### Practical experience

There are no data available on the preparation/mixture itself.

#### 11.2. Information on other hazards

## Other information

There are no data available on the preparation/mixture itself.

#### Further information

There are no data available on the preparation/mixture itself.

#### **SECTION 12: Ecological information**

### 12.1. Toxicity

Based on available data, the classification criteria are not met.

# 12.2. Persistence and degradability

There are no data available on the mixture itself.

## 12.3. Bioaccumulative potential

There are no data available on the mixture itself.

## 12.4. Mobility in soil

There are no data available on the mixture itself.

## 12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

## 12.6. Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

## 12.7. Other adverse effects

Discharge into the environment must be avoided.

#### Further information

There are no data available on the mixture itself.

## SECTION 13: Disposal considerations

## 13.1. Waste treatment methods

#### Disposal recommendations

Waste disposal according to directive 2008/98/EC, covering waste and dangerous waste. Send to a physico-chemical treatment facility under observation of official regulations.

#### Contaminated packaging

The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.

#### **SECTION 14: Transport information**

Land transport	(ADR/RID)
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14.1. UN number or ID number:	UN 3264
14.2. UN proper shipping name:	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (sulphuric acid)
14.3. Transport hazard class(es):	8
14.4. Packing group:	III
Hazard label:	8
Classification code:	C1
Special Provisions:	274
Limited quantity:	5 L
Excepted quantity:	E1



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Transport category:	3	
Hazard No:	80	
Tunnel restriction code:	E	
Inland waterways transport (ADN)		
14.1. UN number or ID number:	UN 3264	
14.2. UN proper shipping name:	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (sulphuric acid)	
14.3. Transport hazard class(es):	8	
14.4. Packing group:		
Hazard label:	8	
Classification code:	C1	
Special Provisions:	274	
Limited quantity:	5 L	
Excepted quantity:	E1	
Marine transport (IMDG)		
14.1. UN number or ID number:	UN 3264	
14.2. UN proper shipping name:	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (sulphuric acid)	
14.3. Transport hazard class(es):	8	
14.4. Packing group:	III	
Hazard label:	8	
Special Provisions:	223, 274	
Limited quantity:	5 L	
Excepted quantity:	E1	
EmS:	F-A, S-B	
Air transport (ICAO-TI/IATA-DGR)		
<u>14.1. UN number or ID number:</u>	UN 3264	
14.2. UN proper shipping name:	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (sulphuric acid)	
14.3. Transport hazard class(es):	8	
14.4. Packing group:	III	
Hazard label:	8	
Special Provisions:	A3 A803	
Limited quantity Passenger:	1L	
Passenger LQ:	Y841	
Excepted quantity:	E1	
IATA-packing instructions - Passenger:	852	
IATA-max. quantity - Passenger:	5 L	
IATA-packing instructions - Cargo:	856	
IATA-max. quantity - Cargo:	60 L	
14.5. Environmental hazards		
ENVIRONMENTALLY HAZARDOUS:	No	
SECTION 15: Regulatory information		
15.1. Safety, health and environmental regu	lations/legislation specific for the substance or mixture	

EU regulatory information	
Information according to Directive 2012/18/EU (SEVESO III):	Not subject to 2012/18/EU (SEVESO III)
Marketing and use of explosives precursor	s (Regulation (EU) 2019/1148):
	n (EU) 2019/1148: all suspicious transactions, and significant eported to the relevant national contact point.
National regulatory information	
Water hazard class (D):	non-hazardous to water

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## **SECTION 16: Other information**

## Changes

This data sheet contains changes from the previous version in section(s): 9,12.

# Abbreviations and acronyms

Met. Corr: Substance or mixture corrosive to metals

Classification	Classification procedure
Met. Corr. 1; H290	On basis of test data

#### Relevant H and EUH statements (number and full text)

H290 May be corrosive to metals.

## **Further Information**

Provide appropriate information, instructions and training to users

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material. The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights.

The receiver of our product is singularly responsible for adhering to existing laws and regulations.

(The data for the relevant ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)