Scientific Laboratory Supplies - Safety Data Sheet

(in accordance with regulation (EU) 2015/830 and regulation (EC) 1272/2008)

Revision: 1.0 Revision date: 18 July 2019

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CHE3726

Section 1. Identification

1.1 Product Identifier CHE3726

Product Name SULPHURIC ACID pure 2.5L.

CAS Number 7664-93-9

REACH Registration No 01-2119458838-20-XXXX

Molecular Formula H₂ so₄ =98.07

1.2 Relevent identified uses of the substance or mixure & uses advised against

Uses of Material Chemical for industrial and laboratory use. Not suitable for domestic use.

1.3 Supplier Scientific Laboratory Supplies

SCIENTIFIC LABORATORY SUPPLIES

Wilford Industrial Estate

Ruddington Lane

Wilford Nottingham NG11 7EP

UNITED KINGDOM

Phone 0115 9821111 Fax 0115 9825275

Email sales@scientific-labs.com

1.4 Emergency Telephone (08:00-17:00) 0115 9821111

(24hr) 112

(Have this document to hand)

Section 2. Hazards Identification

2.1 Classification of the substance or mixture

Classification according to regulation 1272/2008/EC

Skin corrosion/irritation, category 1A (Skin Corr. 1A).

2.2 Label elements

Labelling according to regulation 1272/2008/EC

Signal word Danger

Hazard Pictograms



Hazard Statements Causes severe skin burns and eye damage.

Precautionary Statements

Wear protective gloves / protective clothing / eye protection / face protection. Wash thoroughly after handling. IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. IF IN EYES: Rinse cautiously with water for several

minutes. Remove contact lenses if present and easy to do and continue rinsing.

Section 3. Composition

3.1 Substances

Component	omponent CAS No. EEC No.		REACH No.	Conc w/w	CLP Classification (1272/2008/CE)
Sulphuric acid	7664-93-9 23	31-639-5	01-2119458838-20-XXXX	>98%	Skin Corr. 1A

Section 4. First Aid

4.1 Description of first aid measures

Irrigate thoroughly with plenty of water for at least 10 minutes, holding the eye open. OBTAIN MEDICAL Eyes

ATTENTION URGENTLY.

Skin Wash off skin thoroughly with water. Remove contaminated clothing immediately and wash before re-use.

OBTAIN MEDICAL ATTENTION URGENTLY.

Remove from exposure. Keep warm and at rest. If there is difficulty in breathing give oxygen if available. If Inhalation

breathing stops or shows signs of failing, apply artificial resuscitation. If conscious place in a sitting position. OBTAIN MEDICAL ATTENTION URGENTLY.

If conscious give plenty of water to drink. Do not induce vomiting. If unconscious place in the recovery position. OBTAIN MEDICAL ATTENTION URGENTLY. Ingestion

Personal protection for first Wear protective gloves / eye protection.

aiders

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

No further relevant information available.

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

No further relevant information available.

Section 5. Fire Fighting

5.1 Extinguishing media

Extinguishing Media Consider what other flammable materials are present and act accordingly.

Unsuitable Media Do not allow water to come into direct contact with material.

5.2 Special hazards arising from the substance or mixture

Hazards May evolve toxic fumes if involved in a fire.

5.3 Advice for firefighters

Advice for firefighters Evacuate area immediately. Keep up wind. Avoid exposure to toxic vapours and fumes. Fire-fighters should wear

protective clothing and breathing apparatus.

Section 6. Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal Protection Avoid breathing vapour. Use approved personal protective equipment. Evacuate area immediately. Do not allow

general use of area until it is safe to do so.

6.2 Environmental precautions

Keep material out of sewers, storm drains, surface waters and soil. Keep non-neutralised material out of sewers, Environmental

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storm drains, surface waters and soil. Notify the Environmental Agency and local Environmental Health Officer if

major spillage occurs.

6.3 Methods and material for containment and cleaning up

Major Spillage Contain and absorb on inert material. Transfer absorbent to salvage container for removal. Wash area down with

copious amounts of water.

Minor Spillage Neutralise spill with soda ash, lime, calcium carbonate or sodium bicarbonate. Wash area down with copious

amounts of water.

6.4 Reference to other sections

See section 8.2 for information on protective equipment and section 13 for information on disposal.

Section 7. Storage & Handling

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Do not breath vapours. Do not allow to contaminate clothing. When diluting acid always add, acid to water cautiously with agitation.

Ensure Local Exhaust Ventilation maintains vapour concentrations below the recommended limits.

7.2 Conditions for safe storage, including any incompatibilities

Well ventilated, cool, dry storage.

7.3 Specific end use(s)

See section 1.2.

Section 8. Workplace Exposure & Personal Protection

8.1 Control parameters

Component	CAS No	Concentration		Workplace Exposu	re Limits	
			Long Term	n (8hr TWA)	Short Term 15min period)	
Sulphuric acid	7664-93-9	>98%	-	0.05 mg/m-3	-	-
Sulphuric acid	7664-93-9	0.5%	-	-	-	-

Exposure data source(s) IOELV: Indicative Occupational Exposure Limit Value.

8.2 Exposure controls

maintained chemical cartridge respirator, or use self contained breathing apparatus.

Hand Protection Use PVC gauntlets.

Eye Protection Use chemical full face shield.

Skin Protection If skin contact or contamination of clothing is likely, protective clothing must be worn. Wear PVC oversuit.

Special Hazards No special precautions required.

Section 9. Physical & Chemical Properties

9.1 Information on basic physical and chemical properties

Appearance Colourless, oily liquid.

Odour Odourless.
pH <1 @ 20°C
Boiling Point 290°C
Melting Point 3°C

Flash Point Not applicable
Upper Flammable Limit Not applicable
Lower Flammable Limit Not applicable
Auto Ignition Not applicable

Explosive Properties No. Oxidising Properties No.

Vapour Pressure 1mmHg @ 146°C

Relative Density 1.8400

Water Solubility Completely soluble in water but highly exothermic reaction may cause splattering of acid.

9.2 Other information

No data available.

Section 10. Stability & Reactivity

10.1 Reactivity No data available.

10.2 Chemical Stability Stable under normal conditions

10.3 Possibility of hazardous No data available.

reactions

10.4 Conditions to Avoid No specific conditions.

10.5 Incompatable Materials Oxidising and reducing agents. Alkalis. Reacts with most metals to produce extremely flammable hydrogen gas.

Peroxides, potassium permanganate, sodium, potassium, platinum, potassium tertiary butoxide. Combustible materials. Reacts with sulphide, phosphide, cyanide, carbide and silicides producing very toxic gases. Many organic

compounds.

10.6 Hazardous Decomposition Toxic and acidic dense white fumes.

Products

Section 11. Toxicological Information

11.1 Information on toxicological effects

Eyes The liquid and solutions will cause severe burns. Damage can range from severe irritation and corneal scarring to

permanent blindness.

Skin The liquid and solutions will cause severe burns. Severe ulceration and scarring may occur in serious cases. The

dilute acid is irritating to the skin.

LD50 Skin Not available

Ingestion Ingestion will cause severe mouth burns, and if swallowed extensive damage to the oesophagus. Symptoms may

include salivation, thirst, difficulty in swallowing, pain, shock and vomiting.

LD50 Oral 2140mg/kg Rat

Inhalation Exposure to vapour concentrations above the occupational exposure limits will produce severe irritation of the

eyes, nose, throat and respiratory tract. High concentrations of vapour will seriously damage the membranes

lining the nose, throat and upper respiratory tract.

LD50 Inhalation Not available
TCLo Not available

Carcinogenicity A positive association has been shown between the development of upper respiratory tract cancer and exposure to

high levels of sulphuric acid mist.

Mutagenicity Not considered to be a mutagen.

Reproductive Effects None identified.

Other Information The irritant effect provides warning that control of exposure is needed. 0.125-0.5 ppm are mildly annoying, 1.2-

2.5 ppm definitely unpleasant and 10-20 ppm unbearable.

Section 12. Ecological

12.1 Toxicity Dangerous to aquatic organism: causes damage to crops and vegetables. Natural alkalinity reduces damaged

caused by low pH. Aquatic toxicity LC50 Bluegill sunfish. 24 hr fresh water-24.5 mg/l, 48 hr tap-water-49 mg/l.

LC50 Algal Not available

LC50 Crustacea >100mg/kg Daphnia

LC50 Fish Not available

12.2 Persistence and No data available.

degradability

12.3 Bioaccumulative potential No data available.

12.4 Mobility in soil No data available.

12.5 Results of PBT & vPvB Assessment not required.

assessment

12.6 Other adverse effects None known at present.

Section 13. Disposal Considerations

13.1 Waste treatment methods

Disposal Methods Dispose of in a licensed incinerator. Never dispose of into water courses or sewerage systems.

Contaminated Packaging Very carefully wash out containers with water. Use a licensed waste disposer.

Section 14. Transport Information

14.1 UN Number 1830

14.2 Proper Shipping Name Sulphuric acid

14.3 Transport classes

UN classification 8
Subsidiary hazard(s) None
Transport category 2
ADR Hazard ID 80
Tunnel Restriction Code E

14.4 Packing Group II

14.5 Environment hazards See section 12.

14.6 Special precautions for No special precautions required.

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14.7 Transport in bulk Not transported in bulk.



Section 15. Regulatory Information

$15.1\ Safety, health\ and\ environment\ regulations\ specific\ for\ subtance/mixture.$

Classification, Labeling & Packaging of Substances & Mixtures Regulations (1272/2008/CE)

Classification Skin corrosion/irritation, category 1A

Signal word Danger

Hazard Pictograms



Hazard Statements H314

Causes severe skin burns and eye damage.

Precautionary Statements P280, P264, P301+P330+P331, P303+P361+P353, P305+P351+P338

Wear protective gloves / protective clothing / eye protection / face protection. Wash thoroughly after handling. IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do and continue rinsing.

15.2 Chemical safety assessment

Assessment not required.

Section 16. Other Information

The information contained in this document only covers the hazards presented by this material, it DOES NOT constitute a workplace risk assessment. See sections 11 for toxicological information and section 12 for ecological information.

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