

SAFETY DATA SHEET

SULPHURIC ACID 1.0N (0.5MOL/L) VOLUMETRIC SOLUTION

1. Identification of the substance/preparation and of the company or firm

1.1 Identification of the substance or preparation:

Catalogue no. : KA647

Product name : Sulphuric acid 1.0N (0.5mol/L) VOLUMETRIC SOLUTION

1.2 Use of the substance/preparation: For laboratory utilisation, analysis, research and fine chemistry.

1.3 Identification of the company or firm: Elago Enterprises Pty Ltd, 5 The Cloisters, Cherrybrook, N.S.W. 2126, Australia

Tel no. (61) 2 98998169

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1.4 Emergency telephone: (61) 2 98998169 (9:00am - 5:00 pm) [Office hours]

2. Identification of dangers

2.1 Classification of the substance.

Hazard Class and Category Code(s), Regulation (EC) No 1272/2008 (CLP)

Corrosive to metals, Category 1 : May be corrosive to metals.

2.2 Label elements.

Hazard pictograms



Signal words : Warning.

Hazard statements (H) :

H290 : May be corrosive to metals.

2.3 Other hazards.

None known.

3. Composition/information on ingredients

Chemical nature: Aqueous solution.

3.1 Substance / Preparation.

Not applicable.

3.2 Mixture.

Sulphuric acid

Formular: H_2SO_4

CAS No : 7664-93-9

Molecular weight : 98.08

Content: $\geq 1\% \leq 5\%$

Hazard Class and Category Code(s), Regulation (EC) No 1272/2008 (CLP)

Corrosive to metals, Category 1 : May be corrosive to metals.

Skin corrosive, Category 1A : Causes severe skin burns and eye damage.

Hazard pictograms



Signal words : Danger.

Hazard statements (H) :

H290 : May be corrosive to metals.

H314 : Causes severe skin burns and eye damage.

Precautionary statements (P) :

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

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

Water

CAS No 7732-18-5

Content: $\geq 95\% \leq 99\%$

Contains no other components or impurities which will influence the classification of the product.

4. First-aid measures

4.1 Description of first aid measures.

- Inhaling: Take the person out into the fresh air. If unconscious, seek medical assistance.
- Skin contact: Remove contaminated clothing. Wash skin with plenty of water.
- Eyes: Wash with plenty of water, keeping eyelids open. Small amounts splashed into eyes may cause irreversible. Seek medical assistance.
- Ingestion: Never induce vomiting. Clean mouth with water and drink afterwards plenty of water. Seek immediate medical assistance.

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

Corrosive Product, contact eyes or skin may cause irritant effects.

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

In case of doubt or when symptoms of feeling unwell persist, get medical attention. Never administer anything orally to persons who are unconscious.

5. Fire-fighting measures

5.1 Suitable extinguishing media.

Recommended extinguishing methods: Foam. Dry powder. Carbon dioxide. Water spray. Sand.

5.2 Special hazards arising from the substance.

Special risks: Under fire conditions, hazardous fumes will be present.

5.3 Advice for firefighters.

Do not enter fire area without proper protective equipment, including respiratory protection.

Fire protection equipment: According to the size of the fire, it may be necessary to use protective suits against the heat, individual breathing equipment, gloves, protective goggles or facemasks, and gloves.

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures.

For exposure control and individual protection measures, see section 8.

6.2 Environmental precautions.

Do not allow it to enter the drainage system. Avoid pollution of the soil, water supplies and drains.

6.3 Methods and material for containment and cleaning up.

The contaminated area should be immediately cleaned with an appropriate de-contaminator. Store away from other materials. Collect spillage.

6.4 Reference to other sections.

For exposure control and individual protection measures, see section 8.
For later elimination of waste, follow the recommendations under section 13.

7. Handling and storage

7.1 Precautions for safe handling.

The product does not require special handling measures. Ensure good ventilation and renewal of the air in the premises.
Do not eat, drink or smoke when using this product.

7.2 Conditions for safe storage, including any incompatibilities.

The product does not require special storage measures. Well sealed containers. Away from sources of ignition and heat.

7.3 Specific end use(s).

None.

8. Exposure controls/personal protection

8.1 Control parameters.

The product does NOT contain substances with Professional Exposure Environmental Limit Values.
The product does NOT contain substances with Biological Limit Values.

8.2 Exposure controls.

Personal protection : Avoid all unnecessary exposure.
Respiratory protection : Wear approved mask.
Hand protection : Wear protective gloves.
Eye protection : Chemical goggles or safety glasses.
Hygiene measures : Remove contaminated clothing. Wash hands before breaks and when the job is done.

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties.

Appearance: Liquid.

Colour:	Clear colourless.
Odour:	Odourless
Odour threshold:	No data available.
pH value:	~ 1
Melting Point:	No data available.
Boiling Point:	No data available.
Flash point:	No data available.
Flammability (solid, gas) :	No data available.
Evaporation rate :	No data available.
Vapour pressure:	No data available.
Vapour density :	No data available.
Lower Explosive Limit:	Not applicable.
Upper Explosive Limit:	Not applicable.
Solubility:	Soluble (20 °C)
Density:	No data available.
Relative density:	1.03 g/cm ³ (20 °C)
Log Pow octanol / water at 20°C	No data available.
Decomposition temperature:	No data available.
Viscosity:	No data available.
Explosive properties:	Not classified as explosive.
Oxidizing properties:	No data available.

9.2 Other information.

None.

10. Stability and reactivity

10.1 Reactivity.

The product does not present hazards by their reactivity.

10.2 Chemical stability.

Stable under the recommended handling and storage conditions.

10.3 Possibility of hazardous reactions.

May be corrosive to metals.

10.4 Conditions to avoid.

Avoid strong heating.

10.5 Incompatible materials.

Incompatible with Metals.

10.6 Hazardous decomposition products.

Depending on conditions of use, can be generated corrosive vapors or gases.

11. Toxicological information

11.1 Information on toxicological effects.

Mixture

Acute toxicity.

Inhalation:	Based on available data, the classification criteria are not met.
Dermal:	Based on available data, the classification criteria are not met.
Ingestion:	Based on available data, the classification criteria are not met.
Corrosion:	Based on available data, the classification criteria are not met.
Irritation:	Based on available data, the classification criteria are not met.
Sensitization:	Based on available data, the classification criteria are not met.
Mutagenicity:	Based on available data, the classification criteria are not met.
Carcinogenicity:	Based on available data, the classification criteria are not met.
Toxic for reproduction:	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.

12. Ecological information

Mixture

12.1 Toxicity.

Not established.

12.2 Persistence and Degradability.

Biodegradable.

12.3 Bioaccumulative potential.

Not established.

12.4 Mobility in soil

Not established.

12.5 Results of PBT and vPvB assessment.

The substance does not fulfil the criteria to be identified as PBT substance or vPvB substance according to Annex XIII of Regulation REACH.

12.6 Other adverse effects.

No information is available about other adverse effects for the environment.

13. Disposal considerations

13.1 Waste treatment methods.

Avoid release to the environment. Dispose in a safe manner in accordance with local/national regulations.

14. Transport information

14.1 UN number.

UN2796

14.2 UN proper shipping name.

ADR: UN 2796 SULPHURIC ACID, 8, II, (E)

IMDG: UN 2796 SULPHURIC ACID (SULPHURIC ACID WITH 51% OR LESS ACID), 8, II

ICAO: UN 2796 SULPHURIC ACID, 8, II

14.3 Transport hazard class(es).

Class(es): 8

14.4 Packing group.

Packing group: II

14.5 Environmental hazards.

Marine pollutant: No

14.6 Special precautions for user.

Labels: 8

Hazard number: 80

ADR LQ: 1 L

IMDG LQ: 1 L

Provisions concerning carriage in bulk ADR: Not authorized carriage in bulk in accordance with ADR.

Transport by ship, FEm – Emergency sheets (F – Fire, S - Spills): F-A, S-B

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code.

Not applicable

15. Regulatory information

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

Ensure all national/local regulations are observed.

The product is not affected by REACH Restrictions - Annex XVII

The product is not affected by REACH Authorisation - Annex XIV

15.2 Chemical safety assessment.

Not Scheduled.

16. Other Information

Abbreviations and acronyms :

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.

EC50: Effective concentration, 50%

IC50: Inhibitory Concentration, 50%

LC50: Lethal concentration, 50%.

LD50: Lethal dose, 50%.

Log Pow: Logarithm of the partition octanol-water.

PBT: persistent, bioaccumulative and toxic. vPvB: very persistent and very bioaccumulative.

Sources of key data used.

REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

Review number and date.

v. 1.0

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Further information.

None.

In accordance with REACH Regulation (CE) N° 1907/2006 and with CLP Regulation (CE) N° 1272/2008

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