

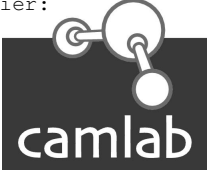
1. Identification

Product Code **1111246**

Product Name **SULPHURIC ACID 0.5M (N/1) A.R.**

CAS Number **7664-93-9**

Supplier: **CAMLAB LIMITED**
Norman Way Industrial Estate
Over
Cambridge
England
CB4 5WE



Phone **01954 233110**

Fax **01954 233101**

Emergency Telephone **08:00-17:00 01954 233110**
24hr 112
(Have this document to hand)

2. Composition

Component	CAS No	EEC No	Conc w/w	Classification & Risk Phrases	Exp (See 8.1)
Sulphuric acid	7664-93-9	231-639-5	4.8%	R35	WEL

3. Hazards Identification

Not considered harmful

4. First Aid Measures

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

Skin Wash off skin thoroughly with water. Remove contaminated clothing immediately and wash before re-use. If discomfort persists OBTAIN MEDICAL ATTENTION.

Inhalation Remove from exposure.

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

5. Fire Fighting Measures

Hazards Presents no specific fire danger.

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.

6. Accidental Release Measures

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.

Environmental Keep material out of sewers, storm drains, surface waters and soil. Keep non-neutralised material out of sewers, storm drains, surface waters and soil. Notify the Environmental Agency and local Environmental Health Officer if major spillage occurs.

6. Accidental Release Measures (continued)

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.

7. Storage & Handling

Handling Precautions	Avoid contact with skin and eyes. Do not breath vapours. Do not allow to contaminate clothing. Ensure Local Exhaust Ventilation maintains vapour concentrations below the recommended limits.
Storage Conditions	Well ventilated, cool, dry storage .

8.1 Workplace Exposure Limits

Component	CAS No	Workplace Exposure Limits				Maximum Exposure Limits			
		Long Term		Short Term		Long Term		Short Term	
		ppm	mg m ⁻³	ppm	mg m ⁻³	ppm	mg m ⁻³	ppm	mg m ⁻³
Sulphuric acid	7664-93-9	-	1.000	-	-	-	-	-	-

8.2 Personal Protection

Respiratory	Use L.E.V. or natural ventilation to maintain vapour concentrations below exposure limits. If not, use a well maintained chemical cartridge respirator, or use self contained breathing apparatus.
Hands	Use nitrile gloves or PVC gauntlets.
Eyes	Use chemical splash proof glasses or goggles.
Skin	If skin contact or contamination of clothing is likely, protective clothing must be worn.

9. Physical & Chemical Properties

Appearance	Clear colourless liquid.
Odour	Odourless.
pH	1 @ 20 °C
Boiling point	Aqueous solution
Melting point	Aqueous solution
Flash point	Not available
Upper Flammable Limit	Not available
Lower Flammable Limit	Not available
Auto Ignition	Not available
Explosive properties	No.
Oxidising Properties	No.
Vapour Pressure	1 mm Hg @ 146 C
Relative Density	1.0308 °C
Water Solubility	Completely soluble in water with moderate increase in temperature.

10. Stability & Reactivity

Chemical Stability	Stable under normal conditions
Conditions to Avoid	No specific conditions.
Materials to Avoid	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.
Hazardous Decomposition Products	Toxic and acidic dense white fumes.

11. Toxicological Information

Eyes	The liquid is be extremely irritating to eyes and can cause chemical eye burns.
Skin	The liquid is irritating to the skin. Repeated exposure may cause dermatitis.
LD50 Skin	Not available
Ingest	Ingestion of large amounts 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 Ingest	Rat 2.14g/Kg
Inhalation	Exposure to vapour concentrations above the occupational exposure limits will produce 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.
Carcinogenicity	Not considered to be a carcinogen.
Mutagenicity	Not considered to be a mutagen.
Reproductive Effects	None identified.
Other Information	The irritant effect provides warning that control of exposure is needed.

12. Ecological

Dangerous to aquatic organism: causes damage to crops and vegetables. Neutralised material presents no specific environmental hazard.

13. Disposal Considerations

Disposal Methods	Dilute in a large excess of water and carefully neutralise with soda ash, then wash to drain with copious amounts of water.
Contaminated Packaging	Wash out containers with water. Use a licensed waste disposer.

14. Transport Information

Proper Shipping Name	Non-restricted
UN Number	Non-restricted
UN Classification	None
Subsidiary Risk	None
Flash Point	Not available
Packing Group	None
Transport Category	None
Marine pollutant	No
ADR Hazard ID	Non-restricted

15. Regulatory Information

Labelling	None
Classification	
Label Symbols	None
Risk & safety Phrases	Avoid contact with eyes.
EEC Number	231-639-5

16. Other Information

Document Information	This document has been prepared in accordance with directive 88/379/EEC. The information contained in this document only covers the hazards presented by this material, it DOES NOT constitute a workplace risk assessment.
----------------------	--

16. Other Information (continued)

Revision Date: 11/10/00.

Data reviewed and PDF file generated: 17/03/10.

Copyright 2010 Camlab Limited.