Vickers Laboratories Ltd - Safety Data Sheet 1108

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

Revision: 2.0
(Replaces revision 1.0 of 04 June 2021)

Revision date: 18 June 2021
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Section 1. Identification

1.1 Product Identifier 1108

Product Name NITRIC ACID 4.0M

CAS Number 7697-37-2
REACH Registration No A registration number is not available as the substance or its uses are exempt, the annual tonnage does not require a registration or the registration is envisaged for a later date.

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 Vickers Laboratories Ltd

Grangefield Industrial Estate
Richardshaw Road
Pudsey
West Yorkshire
LS28 6QW
UNITED KINGDOM

Phone 44 0113 2362811
Fax +44(0)113 2362703
Email safety@viclabs.co.uk
Website www.viclabs.co.uk

1.4 Emergency Telephone (08:00-16:30) +44(0) 113 2362811
(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	H314: Causes severe skin burns and eye damage.
Acute toxicity, category 3 (inhalation)	H331: Toxic if inhaled.

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. Toxic if inhaled.

Section 3. Composition

3.1 Substances

Component	CAS No.	EEC No.	REACH No.	Conc w/w	CLP Classification (1272/2008/CE)
Nitric acid	7697-37-2	231-714-2	01-2119487297-23-XXXX	25.2%	Ox. Liq. 3,Skin Corr. 1A,Acute Tox. 3 (I)

Section 4. First Aid

4.1 Description of first aid measures

Eyes	Irrigate thoroughly with plenty of water for at least 10 minutes, holding the eye open. OBTAIN MEDICAL ATTENTION URGENTLY.
Skin	Wash off skin thoroughly with water. Remove contaminated clothing immediately and wash before re-use. OBTAIN MEDICAL ATTENTION URGENTLY.
Inhalation	Remove from exposure. Keep warm and at rest. If there is difficulty in breathing give oxygen if available. If breathing stops or shows signs of failing, apply artificial resuscitation. If conscious place in a sitting position. OBTAIN MEDICAL ATTENTION URGENTLY.
Ingestion	If conscious give plenty of water to drink. Do not induce vomiting. If unconscious place in the recovery position. OBTAIN MEDICAL ATTENTION URGENTLY.
Personal protection for first aiders	Wear protective gloves / eye protection.

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

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

5.2 Special hazards arising from the substance or mixture

Hazards	Reacts with most metals to produce extremely flammable hydrogen gas. May evolve toxic fumes if involved in a fire. Nitrous gases, nitrogen oxides

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. Use water spray to keep fire exposed containers cool.

Section 6. Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal Protection	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

Enviromental	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.

6.3 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.

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 . Protect from direct sun and store away from sources of ignition. Avoid hot surfaces, naked flames, sources of ignition, compression or shock.

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 Exposure Limits			
			Long Term (8hr TWA)		Short Term 15min period)	
Nitric acid	7697-37-2	25.2%	-	-	1.0 ppm	2.8 mg/m-3

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

8.2 Exposure controls

Respiratory Protection	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.
Hand Protection	Use PVC gauntlets.
Eye Protection	Use tightly fitting chemical splash proof glasses or goggles.
Skin Protection	If skin contact or contamination of clothing is likely, protective clothing must be worn.
Special Hazards	No special precautions required.

Section 9. Physical & Chemical Properties

9.1 Information on basic physical and chemical properties

Appearance	Clear colourless liquid.
Odour	Odourless.
pH	1 @ 20°C
Boiling Point	Not available
Melting Point	Not applicable
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	9mmHg @ 20°C
Relative Density	1.129
Water Solubility	Completely miscible in water.

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 reactions	Reacts with most metals to produce extremely flammable hydrogen gas. Reacts exothermically with water.
10.4	Conditions to Avoid	Keep away from heat.
10.5	Incompatable Materials	Combustible materials. Strong reducing agents, Organic materials, Powdered metals. Reducing agents. Alkalis. Flammable liquid and vapour. Chlorates.
10.6	Hazardous Decomposition Products	May produce hazardous fumes if involved in a fire. Nitrous gases, nitrogen oxides

Section 11. Toxicological Information

11.1 Information on toxicological effects

Eyes	The liquid is be extremely irritating to eyes and can cause chemical eye burns. Damage can range from severe irritation and corneal scarring to permanent blindness.
Skin	The liquid will cause severe burns. Dilute solutions will be 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	Not available
Inhalation	Presents no significant health hazard by inhalation.
LD50 Inhalation	Not available
TCLo	Not available
Carcinogenicity	Not considered to be a carcinogen.
Mutagenicity	No information is available.
Reproductive Effects	None identified.

Section 12. Ecological

12.1	Toxicity	Acidic, nutrient for undesirable algae.
	LC50 Algal	Not available
	LC50 Crustacea	Not available
	LC50 Fish	Not available
12.2	Persistence and degradability	No data available.
12.3	Bioaccumulative potential	No data available.
12.4	Mobility in soil	No data available.
12.5	Results of PBT & vPvB assessment	Assessment not required.
12.6	Other adverse effects	None known at present.

Section 13. Disposal Considerations

13.1 Waste treatment methods

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

Section 14. Transport Information

14.1	**UN Number**	2031
14.2	**Proper Shipping Name**	Nitric 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 user**	No special precautions required.
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; Acute toxicity, category 3 (inhalation)
Signal word	Danger
Hazard Pictograms	
Hazard Statements	H314, H331 Causes severe skin burns and eye damage. Toxic if inhaled.

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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