

Revision: 2.0

(Replaces revision 1.0 of 05 October 2021)

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03 July 2023

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Section 1. Identification

1.1 Product Identifier 1424

Product Name ALUMINIUM STANDARD 100ppm (FOR SERES OL AL ANALYSER)

CAS Number Mixture

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 Relevant identified uses of the substance or mixture & 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 44 113 2362811
Fax +44(0)113 2362703
Email safety@viclabs.co.uk
Website www.viclabs.co.uk

1.4 Emergency Telephone (08:00-16:30) 44 113 2362811 (24hr) 112 (Have this document to hand)

Section 2. Hazards Identification

2.1 Classification of the substance or mixture

Classification according to regulation (EC) 1272/2008 as amended by GB-CLP Regulation, UK SI 2019/720 & UK SI 2020/1567

Oxidising liquid, category 2 H272: May intensify fire; oxidizer.
Skin corrosion/irritation, category 2 H315: Causes skin irritation.
Serious eye damage/irritation, category 2 H319: Causes serious eye irritation.

2.2 Label elements

Labelling according to regulation (EC) 1272/2008 as amended by GB-CLP Regulation, UK SI 2019/720 & UK SI 2020/1567

Signal word Danger

Hazard Pictograms



Hazard Statements	May intensify fire; oxidizer. Causes skin irritation. Causes serious eye irritation.
Precautionary Statements	Wash thoroughly after handling. Wear protective gloves / protective clothing / eye protection. Do not breathe fumes. Use only outdoors or in a well-ventilated area. If skin irritation occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention.

Section 3. Composition

3.2 Mixtures

Component	CAS No.	EC No.	REACH No.	Conc w/w	CLP Classification (1272/2008/CE)
Perchloric acid	7601-90-3	231-512-4		<1.6%	Ox. Liq. 1, Skin Corr. 1A

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.
Skin	Wash off skin thoroughly with water. Remove contaminated clothing immediately and wash before re-use.
Inhalation	Remove from exposure.
Ingestion	Wash out the patients mouth thoroughly with water.
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

Extinguishing Media	Consider what other flammable materials are present and act accordingly.
Unsuitable Media	Nothing specified.

5.2 Special hazards arising from the substance or mixture

Hazards	May evolve toxic fumes if involved in a fire. Contact with combustible material may cause a fire.
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5.3 Advice for firefighters

Advice for firefighters	Consider all other materials in the vicinity.
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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.
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6.2 Environmental precautions

Environmental	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.
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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	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 .

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)	
Perchloric acid	7601-90-3	<1.6%	-	-	-	-

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	Wear gloves.
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	<3 @ 20 °C
Boiling Point	~100 °C
Melting Point	~0 °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	Not applicable
Relative Density	1.000
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	No data available.
10.4	Conditions to Avoid	No specific conditions.
10.5	Incompatible materials	Alkalis. Potassium permanganate. Reacts with most metals to produce extremely flammable hydrogen gas.
10.6	Hazardous Decomposition Products	Will decompose to emit toxic and irritant fumes of hydrogen chloride.

Section 11. Toxicological Information

11.1 Information on toxicological effects

Eyes	The liquid may be irritating to the eyes.
Skin	Causes skin irritation.
LD50 Skin	Not available
Ingestion	Presents no significant hazard by ingestion.
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	Not considered to be a mutagen.
Reproductive Effects	None identified.
Other Information	5-10ppm is the threshold for irritation with severe irritation occurring at 50-100 ppm.

Section 12. Ecological

12.1	Toxicity	No specific environmental hazard.
	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	Neutralise with lime water or sodium hydroxide prior to disposal. Flush to drain.
Contaminated Packaging	Wash out containers with water. Use a licensed waste disposer.

Section 14. Transport Information

14.1 UN Number	Non-restricted
14.2 Proper Shipping Name	Non-restricted
14.3 Transport classes	
UN classification	None
Subsidiary hazard(s)	None
Transport category	None
ADR Hazard ID	Non-restricted
Tunnel Restriction Code	Non-restricted
14.4 Packing Group	None
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 substance/mixture.

Classification, Labeling & Packaging of Substances & Mixtures Regulations (1272/2008/CE) as amended by GB-CLP Regulation, UK SI 2019/720 & UK SI 2020/1567

Classification Oxidising liquid, category 2; Skin corrosion/irritation, category 2; Serious eye damage/irritation, category 2

Signal word Danger

Hazard Pictograms



Hazard Statements H272, H315, H319
May intensify fire; oxidizer. Causes skin irritation. Causes serious eye irritation.

Precautionary Statements P264, P280, P260, P271, P332+P313, P337+P313
Wash thoroughly after handling. Wear protective gloves / protective clothing / eye protection. Do not breathe fumes. Use only outdoors or in a well-ventilated area. If skin irritation occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention.

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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