

Revision: 2.0
(Replaces revision 1.1 of 04 March 2021)Revision date: 08 February 2022
Date printed: 12 August 2023**Section 1. Identification****1.1 Product Identifier** 3956

Product Name PHOSPHATE BUFFER SOLUTION (30g/L KI)(hard water)

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 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**

Spec target organ tox - repeat, category 2

H373: May cause damage to organs through prolonged or repeated exposure.

2.2 Label elements**Labelling according to regulation 1272/2008/EC**

Signal word Warning

Hazard Pictograms



Hazard Statements May cause damage to organs through prolonged or repeated exposure.

Precautionary Statements Do not breathe dust / fume / gas / mist / vapours / spray. Get Medical advice/attention if you feel unwell. Dispose of contents / container to an approved waste disposal plant

Section 3. Composition

3.2 Mixtures

Component	CAS No.	EEC No.	REACH No.	Conc w/w	CLP Classification (1272/2008/CE)
Orthophosphoric acid	7664-38-2	231-633-2	01-2119485924-24-XXXX	<10%	Skin Corr. 1B, Acute Tox. 4 (O), Eye Dam. 1
Potassium iodide	7681-11-0	231-659-4	01-2119906339-35-XXXX	3%	STOT RE 1

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. If discomfort persists OBTAIN MEDICAL ATTENTION.
Skin	Wash off skin thoroughly with water. Remove contaminated clothing immediately and wash before re-use. If irritation persists or there is any sign of skin damage, seek IMMEDIATE MEDICAL ASSISTANCE
Inhalation	Remove from exposure.
Ingestion	If conscious wash out mouth thoroughly with water and give water or milk to drink. In severe cases or if exposure has been great, OBTAIN MEDICAL ATTENTION.
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	Presents no specific fire danger.
---------	-----------------------------------

5.3 Advice for firefighters

Advice for firefighters	Consider all other materials in the vicinity.
-------------------------	-----------------------------------------------

Section 6. Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal Protection	Presents no major hazards.
---------------------	----------------------------

6.2 Environmental precautions

Environmental	Presents no major environmental hazard.
---------------	-----------------------------------------

6.3 Methods and material for containment and cleaning up

Major Spillage	Brush to drain. Wash area down with copious amounts of water.
Minor Spillage	Brush to drain. 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

No specific precautions.

7.2 Conditions for safe storage, including any incompatibilities

Store in a dry place protected against moisture and water.

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		
Orthophosphoric acid	7664-38-2	<10%	-	1.0 mg/m-3	-	2.0 mg/m-3
Potassium iodide	7681-11-0	3%	-	-	-	-

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

8.2 Exposure controls

Respiratory Protection	In cases where a spray or mist may be formed, 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 nitrile gloves or 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	5 @ 20°C
Boiling Point	Aqueous solution
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	Not applicable
Relative Density	1.1200
Water Solubility	Completely soluble 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	No specific materials to avoid.
10.6	Hazardous Decomposition Products	None unusual.

Section 11. Toxicological Information

11.1 Information on toxicological effects

Eyes	The liquid may be irritating to the eyes but unlikely to cause serious injury.
Skin	Unlikely to be irritating to the skin.
LD50 Skin	Not available
Ingestion	Ingestion of large amounts will cause severe internal irritation and damage, nausea, vomiting, abdominal pains and diarrhoea.
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.

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	Flush to drain.
Contaminated Packaging	Wash out containers with water.

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)

Classification Spec target organ tox - repeat, category 2

Signal word Warning

Hazard Pictograms



Hazard Statements H373
May cause damage to organs through prolonged or repeated exposure.

Precautionary Statements P260, P314, P501
Do not breathe dust / fume / gas / mist / vapours / spray. Get Medical advice/attention if you feel unwell. Dispose of contents / container to an approved waste disposal plant

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.

Revision number: 2.0 (Supercedes revision 1.1)

Revision date: 08 February 2022

Reviewed by chemist: 08 February 2022

Printed date: 12 August 2023

Copyright: 2023 Vickers Laboratories Ltd