

Revision: 2.1

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Section 1. Identification**1.1 Product Identifier**

1772

Product Name

PERIODIC ACID pure

CAS Number

10450-60-9

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.

Molecular Formula

 $H_2IO_4 = 227.94$ **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



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(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**

Oxidising solid, category 1

Skin corrosion/irritation, category 1C

Hazard to aquatic environment, category 1

Hazard to aquatic environment, category 1

H271: May cause fire or explosion; strong oxidizer.

H314: Causes severe skin burns and eye damage.

H400: Very toxic to aquatic life.

H410: Very toxic to aquatic life with long lasting effects.

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

Signal word

Danger

Hazard Pictograms



Hazard Statements May cause fire or explosion; strong oxidizer. Causes severe skin burns and eye damage. Very toxic to aquatic life with long lasting effects.

Precautionary Statements Wear protective gloves / protective clothing / eye protection / face protection. Do not breathe dust. IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do and continue rinsing.

Section 3. Composition

3.1 Substances

Component	CAS No.	EEC No.	REACH No.	Conc w/w	CLP Classification (1272/2008/CE)
Periodic acid	10450-60-9	233-937-0		98%	Ox. Sol. 1, Skin Corr. 1C, Aquatic Acute 1, Aquatic Chronic 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. 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

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	Contact with combustible material may cause a fire. May evolve toxic fumes if involved in a fire.
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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.
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Section 6. Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal Protection Avoid breathing dust. Use approved personal protective equipment. Do not allow general use of area until it is safe to do so.

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.

6.3 Methods and material for containment and cleaning up

Major Spillage Shovel/sweep up into container for removal Notify the Environmental Agency and local Environmental Health Officer if major spillage occurs.

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 to a minimum.

7.2 Conditions for safe storage, including any incompatibilities

Well ventilated, cool, dry storage . Keep well separated from acids, metals, explosives, organic peroxides and ignitable materials.

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)
Periodic acid	10450-60-9	98%	-	-

Exposure data source(s) No occupational exposure data currently available.

8.2 Exposure controls

Respiratory Protection If process creates significant amounts of dust use L.E.V. or wear suitable dust mask.

Hand Protection Wear gloves.

Eye Protection Use tightly fitting chemical splash proof glasses or goggles.

Skin Protection Avoid contact with skin. 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 Colourless crystals or white powder.
Odour Odourless.
pH 1 @ 20°C
Boiling Point Not available
Melting Point 125°C
Flash Point Not applicable
Upper Flammable Limit Not applicable

Lower Flammable Limit	Not applicable
Auto Ignition	Not applicable
Explosive Properties	Not explosive as a single substance.
Oxidising Properties	A strong oxidising agent.
Vapour Pressure	Not applicable
Relative Density	Not available
Water Solubility	Very 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	Reducing agents.
10.5	Incompatible Materials	Reducing agents. Alkalis. Many organic compounds. Combustible materials.
10.6	Hazardous Decomposition Products	Decomposes to form toxic fumes of iodides.

Section 11. Toxicological Information

11.1 Information on toxicological effects

Eyes	Causes serious eye damage.
Skin	The solid and solutions will be irritating to the skin. Causes burns.
LD50 Skin	Not available
Ingestion	Ingestion of large amounts will cause gastrointestinal irritation.
LD50 Oral	Not available
Inhalation	Prolonged exposure to dust or fume concentrations above the occupational exposure limits may produce irritation of the eyes, nose, throat and respiratory tract.
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	Low levels are readily bio-degraded in the environment. Higher levels are toxic to marine and plant life.
	LC50 Algal	1.1 mg/L Algae (72 hours)
	LC50 Crustacea	0.18 mg/L Daphnia magna (48 hours)
	LC50 Fish	0.17 mg/L Rainbow Trout (96 hours)
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	Do not dispose of as domestic waste.
Contaminated Packaging	Wash out containers with water.

Section 14. Transport Information

14.1 UN Number	1479
14.2 Proper Shipping Name	Oxidizing solid, N.O.S. (Periodic acid)
14.3 Transport classes	
UN classification	5.1
Subsidiary hazard(s)	None
Transport category	2
ADR Hazard ID	50
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 substance/mixture.

Classification, Labeling & Packaging of Substances & Mixtures Regulations (1272/2008/CE)

Classification Oxidising solid, category 1; Skin corrosion/irritation, category 1C; Hazard to aquatic environment, category 1; Hazard to aquatic environment, category 1

Signal word Danger

Hazard Pictograms



Hazard Statements H271, H314, H410
May cause fire or explosion; strong oxidizer. Causes severe skin burns and eye damage. Very toxic to aquatic life with long lasting effects.

Hazard Statements (Packs of 500ml/g or less) H272, H314
May intensify fire; oxidizer. Causes severe skin burns and eye damage.

Hazard Statements (Packs of 100ml/g or less) H272, H314
May intensify fire; oxidizer. Causes severe skin burns and eye damage.

Precautionary Statements P280, P260, P301+P330+P331, P303+P361+P353, P304+P340, P305+P351+P338
Wear protective gloves / protective clothing / eye protection / face protection. Do not breathe dust. IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do and continue rinsing.

Precautionary Statements (Packs of 500ml/g or less) P280, P260, P301+P330+P331, P305+P351+P338
Wear protective gloves / protective clothing / eye protection / face protection. Do not breathe dust. IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do and continue rinsing.

Precautionary Statements P280, P305+P351+P338
(Packs of 100ml/g or less)

Wear protective gloves / protective clothing / eye protection. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do and continue rinsing.

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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