

Revision: 1.1

Revision date:

16 April 2021

Date printed:

12 August 2023

## Section 1. Identification

### 1.1 Product Identifier 1635

Product Name	POTASSIUM PERIODATE pure
CAS Number	7790-21-8
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	$KIO_4$ =230.00

### 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](mailto:safety@viclabs.co.uk)  
Website [www.viclabs.co.uk](http://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

Oxidising solid, 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.
Spec target organ tox - single, category 3	H335: May cause respiratory irritation.

### 2.2 Label elements

#### Labelling according to regulation 1272/2008/EC

Signal word Danger

Hazard Pictograms



Hazard Statements May intensify fire; oxidizer. Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation.

Precautionary Statements Keep away from heat / sparks/open flames/hot surfaces - No smoking. Keep / Store away from clothing / combustible materials. Take any precaution to avoid mixing with combustibles... Wear protective gloves / protective clothing / eye protection.

## Section 3. Composition

### 3.1 Substances

Component	CAS No.	EEC No.	REACH No.	Conc w/w	CLP Classification (1272/2008/CE)
Potassium periodate	7790-21-8	232-196-0		100%	Ox. Sol. 2, Skin Irrit. 2, Eye Irrit. 2, STOT SE 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. If discomfort persists 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. 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	Water spray, foam, dry powder or carbon dioxide.
Unsuitable Media	Nothing specified.

### 5.2 Special hazards arising from the substance or mixture

Hazards	May evolve toxic fumes if involved in a fire.
---------	---

### 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.
-------------------------	--

## Section 6. Accidental Release Measures

### 6.1 Personal precautions, protective equipment and emergency procedures

Personal Protection	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 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 Wash to drain with copious amounts of water.  
Minor Spillage                      Wash to drain 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 dust. Do not allow to contaminate clothing.  
Ensure Local Exhaust Ventilation maintains dust concentrations below the recommended limits.

### 7.2 Conditions for safe storage, including any incompatibilities

Store in a suitable area for oxidising agents. Keep well separated from acids, metals, explosives, organic peroxides and ignitable materials. Do not store on wooden surfaces.

### 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	
Potassium periodate	7790-21-8	100%	-	-	-

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

### 8.2 Exposure controls

Respiratory Protection              Use L.E.V. or natural ventilation to maintain dust 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                        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                              White powder.  
Odour                                        Odourless.  
pH    5 @ 20°C  
Boiling Point                              Not available  
Melting Point                              582°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                      Yes.  
Vapour Pressure                        Not applicable  
Relative Density                        Not available

Water Solubility Sparingly 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	Hot surfaces, naked flames or other sources of ignition.
10.5	Incompatible Materials	Reducing agents. Metal powders.
10.6	Hazardous Decomposition Products	Not determined.

## Section 11. Toxicological Information

### 11.1 Information on toxicological effects

Eyes	Causes serious eye irritation.
Skin	Causes skin irritation.
LD50 Skin	Not available
Ingestion	Ingestion of low to moderate amounts can result in burning in the throat and gastro-intestinal effects such as ulceration, nausea, vomiting, diarrhoea and constipation.
LD50 Oral	Not available
Inhalation	May cause respiratory irritation.
LD50 Inhalation	Not available
TCLo	Not available
Carcinogenicity	No information is available.
Mutagenicity	Not considered to be a mutagen.
Reproductive Effects	No data available.

## Section 12. Ecological

12.1	Toxicity	Small amounts present 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	Do not dispose of as domestic waste. Mix with a reducing agent eg. sodium metabisulphite or thiosulphate or a ferrous salt. Dilute with water. A sulphite/ferrous salt requires the addition of 2M sulphuric acid to promote rapid reduction. Neutralise slurry with soda ash and wash to drain with lots of water.
------------------	---

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. (Potassium Periodate)
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 2; Skin corrosion/irritation, category 2; Serious eye damage/irritation, category 2; Spec target organ tox - single, category 3

Signal word Danger

Hazard Pictograms



Hazard Statements H272, H315, H319, H335  
May intensify fire; oxidizer. Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation.

Precautionary Statements P210, P220, P221, P280  
Keep away from heat / sparks/open flames/hot surfaces - No smoking. Keep / Store away from clothing / combustible materials. Take any precaution to avoid mixing with combustibles... Wear protective gloves / protective clothing / eye protection.

### 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: 1.1 (Supersedes revision 1.0)

Revision date: 16 April 2021

Reviewed by chemist: 16 April 2021

Printed date: 12 August 2023

Copyright: 2023 Vickers Laboratories Ltd

