

Revision: 3.0  
(Replaces revision 2.0 of 28 April 2021)Revision date: 26 July 2021  
Date printed: 12 August 2023**Section 1. Identification****1.1 Product Identifier** 0618Product Name SODIUM PERBORATE 4H<sub>2</sub>O pure

CAS Number 10486-00-7

REACH Registration No 01-2119516039-43-XXXX

Molecular Formula NaBO<sub>3</sub> · 4H<sub>2</sub>O =153.86**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 LtdGrangefield Industrial Estate  
Richardshaw Road  
Pudsey  
West Yorkshire  
LS28 6QW  
UNITED KINGDOMPhone 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**

Acute toxicity, category 4 (oral)

Acute toxicity, category 4 (inhalation)

Serious eye damage/irritation, category 1

Reproductive toxicity, category 1B

Spec target organ tox - single, category 3

H302: Harmful if swallowed.

H332: Harmful if inhaled.

H318: Causes serious eye damage.

H360: May damage fertility or the unborn child.

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. Harmful if swallowed. Harmful if inhaled. May damage fertility or the unborn child. May cause respiratory irritation. Causes serious eye damage.

Precautionary Statements Obtain special instructions before use. Keep / Store away from clothing / combustible materials. Avoid breathing dust / fume / gas / mist / vapours / spray. Wear protective gloves / protective clothing / eye protection / face protection. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do and continue rinsing. IF exposed or concerned: Get medical advice/attention.

## Section 3. Composition

### 3.1 Substances

Component	CAS No.	EEC No.	REACH No.	Conc w/w	CLP Classification (1272/2008/CE)
Sodium perborate	10486-00-7	239-172-9	01-2119516039-43-XXXX	>97%	Acute Tox. 4 (O), Acute Tox. 4 (I), Eye Dam. 1, Repr. 1B, 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. Remove contact lenses if present and easy to do, continue rinsing. If discomfort persists OBTAIN MEDICAL ATTENTION.

Skin Take off immediately all contaminated clothing. Wash off skin thoroughly with water. OBTAIN MEDICAL ATTENTION.

Inhalation Remove from exposure. OBTAIN MEDICAL ATTENTION.

Ingestion Wash out the patients mouth thoroughly with water. If conscious, give 1 pint of water to drink immediately. 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 May evolve toxic fumes if involved in a fire. Borane/boron oxides, Sodium Oxides

### 5.3 Advice for firefighters

Advice for firefighters Evacuate area immediately. Keep up wind. Avoid exposure to toxic vapours and fumes. Use Water spray to help reduce vapours; but may not prevent ignition in closed spaces 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 Avoid breathing dust. Avoid contact with skin. Ensure adequate ventilation. Evacuate area.

### 6.2 Environmental precautions

Environmental Keep material out of sewers, storm drains, surface waters and soil.

### 6.3 Methods and material for containment and cleaning up

Major Spillage	Wet material with water to make it damp. This will prevent dispersal of the dust during disposal. Shovel/sweep up into 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 dust. Do not allow to contaminate clothing. Ensure adequate ventilation.

Take off immediately all contaminated clothing. Wear protective gloves / protective clothing / eye protection. Wash thoroughly after handling.

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

Store in a suitable area for oxidising agents. Do not store on wooden surfaces. Protect against moisture to prevent decomposition. Keep well separated from combustible 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
Sodium perborate	10486-00-7	>97%	-	-

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	White crystalline powder or granules.
Odour	No specific odour.
pH	10-10.4 @ 25°C (10 g/L)
Boiling Point	Not available
Melting Point	60 °C
Flash Point	Not applicable
Upper Flammable Limit	Not applicable
Lower Flammable Limit	Not applicable
Auto Ignition	Not applicable
Explosive Properties	No.
Oxidising Properties	Not applicable
Vapour Pressure	Not applicable
Relative Density	Not available
Water Solubility	0.1 g/L @ 20 °C

### 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	Violent reactions possible with: All metals. Alkali metals. Heavy metals and their salts. Acids, bases, oxidising agents and reducing agents.
10.4	Conditions to Avoid	No specific conditions.
10.5	Incompatible Materials	Strong oxidising agents.
10.6	Hazardous Decomposition Products	May produce hazardous fumes if involved in a fire. Borane/boron oxides, Sodium Oxides

## Section 11. Toxicological Information

### 11.1 Information on toxicological effects

Eyes	Causes serious eye damage.
LD50 Skin	>2000mg/kg Rabbit
Ingestion	Harmful if swallowed. Ingestion of large amounts may cause diarrhoea, nausea, vomiting, hyperpnoea and convulsions.
LD50 Oral	1200 mg/Kg Rat
Inhalation	May cause respiratory irritation. Harmful if inhaled.
LD50 Inhalation	1.6 mg/L Rat
TCLo	Not available
Carcinogenicity	Not considered to be a carcinogen.
Mutagenicity	Not considered to be a mutagen.
Reproductive Effects	May damage fertility or the unborn child.

## Section 12. Ecological

12.1	Toxicity	No data available.
	LC50 Algal	Not available
	LC50 Crustacea	Not available
	LC50 Fish	Not available
12.2	Persistence and degradability	Readily bio-degraded in the environment.
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. Dispose of via an authorised waste disposal contractor to an approved waste disposal site, observing all local and national regulations.
Contaminated Packaging	Dispose of in the same way as the unused product.

## Section 14. Transport Information

<b>14.1 UN Number</b>	1479
<b>14.2 Proper Shipping Name</b>	Oxidising solid, N.O.S. (Sodium peroxometaborate tetrahydrate)
<b>14.3 Transport classes</b>	
UN classification	5.1
Subsidiary hazard(s)	None
Transport category	3
ADR Hazard ID	50
Tunnel Restriction Code	E
<b>14.4 Packing Group</b>	III
<b>14.5 Environment hazards</b>	See section 12.
<b>14.6 Special precautions for user</b>	No special precautions required.
<b>14.7 Transport in bulk</b>	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** Acute toxicity, category 4 (oral); Acute toxicity, category 4 (inhalation); Serious eye damage/irritation, category 1; Reproductive toxicity, category 1B; Spec target organ tox - single, category 3

**Signal word** Danger

**Hazard Pictograms**



**Hazard Statements** H272, H302, H332, H360, H335, H318  
May intensify fire; oxidizer. Harmful if swallowed. Harmful if inhaled. May damage fertility or the unborn child. May cause respiratory irritation. Causes serious eye damage.

**Precautionary Statements** P201, P220, P261, P280, P305+P351+P338, P308+P313  
Obtain special instructions before use. Keep / Store away from clothing / combustible materials. Avoid breathing dust / fume / gas / mist / vapours / spray. Wear protective gloves / protective clothing / eye protection / face protection. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do and continue rinsing. IF exposed or concerned: 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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