

Revision: 1.1

Revision date:

16 April 2021

Date printed:

12 August 2023

Section 1. Identification

1.1 Product Identifier 4772

Product Name SODIUM TETRABORATE 10H₂O U.S.P

CAS Number 1303-96-4

REACH Registration No 01-2119490790-32-XXXX

Molecular Formula $\text{Na}_2\text{B}_4\text{O}_7 \cdot 10\text{H}_2\text{O} = 381.37$

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

Serious eye damage/irritation, category 2

Reproductive toxicity, category 1B

H319: Causes serious eye irritation.

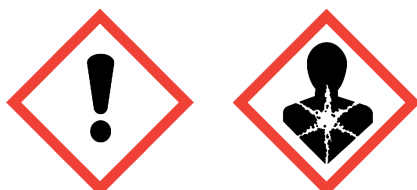
H360: May damage fertility or the unborn child.

2.2 Label elements

Labelling according to regulation 1272/2008/EC

Signal word Danger

Hazard Pictograms



Hazard Statements May damage fertility or the unborn child. Causes serious eye irritation.

Precautionary Statements Obtain special instructions before use. Use personal protective equipment as required. IF exposed or concerned: Get medical advice/attention. Do not handle until all safety precautions have been read and understood. 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)
Sodium tetraborate, decahydrate	1303-96-4	215-540-4	01-2119490790-32-XXXX	>99%	Eye Irrit. 2, Repr. 1B

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.
Inhalation	Remove from exposure.
Ingestion	Wash out the patients mouth thoroughly with water. 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	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 Local Exhaust Ventilation maintains dust 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		
Sodium tetraborate, decahydrate	1303-96-4	>99%	-	-	5.0 ppm	-

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

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 powder.
Odour	No specific odour.
pH	9 @ 20°C solution.
Boiling Point	Not available
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	1.7300
Water Solubility	4.7%

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 Strong oxidising agents.
- 10.6** Hazardous Decomposition Products May produce hazardous fumes if involved in a fire.

Section 11. Toxicological Information

11.1 Information on toxicological effects

Eyes	Contact with the solid or dust will be irritating to the eyes.
Skin	The solid and solutions may be irritating to the skin. Repeated exposure may cause dermatitis.
LD50 Skin	10,000mg/kg Rabbit
Ingestion	No information is available.
LD50 Oral	4,500 - 5,000mg/kg Rat
Inhalation	Inhalation of dust 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	May damage fertility or the unborn child.

Section 12. Ecological

- 12.1** Toxicity No data available.
- LC50 Algal 158mg/l Green algae (96 hours)
- LC50 Crustacea 1,085 - 1,402mg/l Daphnia magna (48 hours)
- LC50 Fish 178mg/l Goldfish (72 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	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 Serious eye damage/irritation, category 2; Reproductive toxicity, category 1B

Signal word Danger

Hazard Pictograms



Hazard Statements H360, H319
May damage fertility or the unborn child. Causes serious eye irritation.

Precautionary Statements P201, P281, P308+P313, P202, P305+P351+P338
Obtain special instructions before use. Use personal protective equipment as required. IF exposed or concerned: Get medical advice/attention. Do not handle until all safety precautions have been read and understood. 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.

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