

Safety Data Sheet

BORAX

Version 1.1

Revision Date: 04/10/2025

SECTION 1. IDENTIFICATION

Product name : Borax

Synonyms : Sodium Tetraborate

Recommended use of the chemical and restrictions on use

Recommended use : Industrial chemical

Restricted Uses : No data available

Supplier or Repackaging Details

Company : Steveston Chemical Solutions Ltd.

Address : 2353-13353 Commerce Parkway
Richmond, BC V6V 3A1
Canada

Emergency telephone number:

Local Emergency Contact : During Office hours Monday-Friday, 8.00 am - 4.30 pm (Pacific Standard Time) : 1-866-686-4827

Additional Information: : E-mail: sales@stevestonchemicalsolutions.com
Website: www.stevestonchemicalsolutions.com

SECTION 2. HAZARD IDENTIFICATION

Hazardous Classification of the substance or mixture

Eye irritation : Category 2A

Reproductive toxicity : Category 2

:

Label elements

Hazard pictograms :




Signal word : Warning

Hazard statements : H319 Causes serious eye irritation.
H361 Suspected of damaging fertility or the unborn child.

Precautionary statements : **Prevention:**
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.

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P264 Wash skin thoroughly after handling.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
Response:
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308 + P313 IF exposed or concerned: Get medical advice/ attention.
P337 + P313 If eye irritation persists: Get medical advice/ attention.
Storage:
P405 Store locked up.
Disposal:
P501 Dispose of contents/ container to an approved waste disposal plant.

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Substance

Hazardous components

CAS-No.	Chemical name	% by Weight	Synonyms
12179-04-3	Sodium Tetraborate	90 - 100	Borates, tetra sodium salts, pentahydrate

Actual concentration or concentration range is withheld as a trade secret

Molecular formula : Na₂B₄O₇·5H₂O

SECTION 4. FIRST-AID MEASURES

General advice : Consult a physician.
Show this safety data sheet to the doctor in attendance.
Do not leave the victim unattended.

If inhaled : If unconscious, place in recovery position and seek medical advice.

In case of skin contact : If skin irritation persists, call a physician.
If on skin, rinse well with water.
If on clothes, remove clothes.

In case of eye contact : Small amounts splashed into eyes can cause irreversible tissue damage and blindness.
In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
Continue rinsing eyes during transport to hospital.
Keep eye wide open while rinsing.
If eye irritation persists, consult a specialist.

If swallowed : Take victim immediately to hospital.
Keep respiratory tract clear.

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Most important symptoms and effects, both acute and delayed	Do NOT induce vomiting. Never give anything by mouth to an unconscious person.
	: Nausea Vomiting Diarrhoea Redness Irritation
Notes to physician	: Treat symptomatically

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media	: Use an extinguishing media appropriate for surrounding fire.
Unsuitable extinguishing media	: High volume water jet
Specific hazards during fire-fighting	: Do not allow run-off from fire fighting to enter drains or water courses. During a fire, irritating or toxic decomposition products may be generated.
Hazardous combustion products	: No hazardous combustion products are known
Specific extinguishing methods	: Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.
Further information	: Collect contaminated fire extinguishing water separately. This must not be discharged into drains.
Special protective equipment for firefighters	: Wear self-contained breathing apparatus for firefighting if necessary.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	: Use personal protective equipment. Avoid dust formation. Avoid breathing dust.
Environmental precautions	: Prevent product from entering drains. Prevent further leakage or spillage if safe to do so. If the product contaminates rivers and lakes or drains inform respective authorities.
Methods and materials for containment and cleaning up	: Keep in suitable, closed containers for disposal.

SECTION 7. HANDLING AND STORAGE

Advice on protection against fire and explosion	: Avoid dust formation. Provide appropriate exhaust ventilation at places where dust is formed.
Advice on safe handling	: Avoid formation of respirable particles. Do not breathe vapours/dust. Avoid exposure - obtain special instructions before use. Avoid contact with skin and eyes.

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For personal protection see section 8.
Smoking, eating and drinking should be prohibited in the application area.
Provide sufficient air exchange and/or exhaust in work rooms.
Dispose of rinse water in accordance with local and national regulations.

Conditions for safe storage : Keep container tightly closed in a dry and well-ventilated place.
Containers which are opened must be carefully resealed and kept upright to prevent leakage.
Observe label precautions.
Electrical installations / working materials must comply with the technological safety standards.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

CAS-No.	Components	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
12179-04-3	Sodium Tetraborate Pentahydrate	TWA	1 mg/m ³	CA AB OEL
		STEL	3 ppm	CA AB OEL
		TWAEV (inhalable dust)	2 mg/m ³	CA QC OEL
		STEV (inhalable dust)	6 mg/m ³	CA QC OEL
		TWA (Inhalable)	2 mg/m ³ (Borate)	CA BC OEL
		STEL (Inhalable)	6 mg/m ³ (Borate)	CA BC OEL

Personal protective equipment

Respiratory protection : No personal respiratory protective equipment normally required.
In the case of dust or aerosol formation use respirator with an approved filter.
Dust safety masks are recommended when the dust concentration is more than 10 mg/m³.

Hand protection

Remarks : The suitability for a specific workplace should be discussed with the producers of the protective gloves.

Eye protection : Eye wash bottle with pure water
Tightly fitting safety goggles
Wear face-shield and protective suit for abnormal processing problems.

Skin and body protection : Dust impervious protective suit
Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Hygiene measures : When using do not eat or drink.
When using do not smoke.
Wash hands before breaks and at the end of workday.

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SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: Crystalline powder, granular, solid
Colour	: white
Odour	: odorless
Odour Threshold	: No data available
pH	: 9.3 @ 3 % @ 20 °C (68 °F)
Freezing Point (Melting point/freezing point)	: 200 °C (392 °F)
Boiling Point (Boiling point/boiling range)	: 1,575 °C (2,867 °F) (1013 hPa)
Flash point	: Not applicable
Evaporation rate	: No data available
Flammability (solid, gas)	: No data available
Upper explosion limit	: No data available
Lower explosion limit	: No data available
Vapour pressure	: @ 20 °C (68 °F) negligible
Relative vapour density	: No data available
Relative density	: 1.81
Density	: 1.81 g/cm ³
Solubility(ies)	
Water solubility	: soluble @ 20 °C (68 °F)
Solubility in other solvents	: soluble Solvent: Methanol
Partition coefficient: n-octanol/water	: No data available
Auto-ignition temperature	: Not applicable
Thermal decomposition	: No data available

SECTION 10. STABILITY AND REACTIVITY

Reactivity	: No dangerous reaction known under conditions of normal use.
Chemical stability	: Stable under normal conditions.
Possibility of hazardous reactions	: Dust may form explosive mixture in air.
Conditions to avoid	: excessive heat
Incompatible materials	: Strong reducing agents metal hydrides Acetic anhydride Alkali metals Acids alkaloids metal salts

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Hazardous decomposition products : Thermal decomposition can lead to release of irritating gases and vapours.
water vapor

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity

Product:

Acute oral toxicity : Assessment: The component/mixture is minimally toxic after single ingestion.

Acute dermal toxicity : Assessment: The substance or mixture has no acute dermal toxicity

Components:

12179-04-3:

Acute oral toxicity : LD50 (Rat): 3,305 mg/kg

Acute inhalation toxicity : LC50 (Rat): > 2 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist

Acute dermal toxicity : LD50 (Rabbit): > 2,000 mg/kg
Remarks: No data available

Skin corrosion/irritation

Product:

Result: No skin irritation

Components:

12179-04-3:

Species: Rabbit

Result: Mild skin irritation

Serious eye damage/eye irritation

Product:

Result: Irritating to eyes.

Components:

12179-04-3:

Species: Rabbit

Result: Risk of serious damage to eyes.

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Respiratory or skin sensitisation

Components:

12179-04-3:

Test Type: Maximization test

Species: Guinea pig

Result: Did not cause sensitisation on laboratory animals.

Germ cell mutagenicity

Components:

12179-04-3:

Genotoxicity in vitro : Test Type: Ames test
Species: Salmonella typhimurium
Result: negative

Germ cell mutagenicity - Assessment : Tests on bacterial or mammalian cell cultures did not show mutagenic effects.

Carcinogenicity

Components:

12179-04-3:

Carcinogenicity - Assessment : No evidence of carcinogenicity in animal studies.

Reproductive toxicity

Product:

Reproductive toxicity - Assessment : Some evidence of adverse effects on sexual function and fertility, based on animal experiments.

Components:

12179-04-3:

Teratogenicity - Assessment : Presumed human reproductive toxicant

STOT - single exposure

Product:

Assessment: The substance or mixture is not classified as specific target organ toxicant, single exposure.

Components:

12179-04-3:

Exposure routes: Inhalation

Target Organs: Respiratory system

Assessment: May cause respiratory irritation., The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with respiratory tract irritation.

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Aspiration toxicity

Components:

12179-04-3:

No aspiration toxicity classification

Further information

Product:

Remarks: No data available

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Components:

12179-04-3:

Toxicity to fish : LC50 (Catostomus commersoni (white sucker)): 125 mg/l
Exposure time: 96 h

Toxicity to daphnia and other : EC50 (Daphnia magna (Water flea)): 133 mg/l
aquatic invertebrates Exposure time: 48 h

Toxicity to algae : EC50 (Selenastrum capricornutum (green algae)): 40 mg/l
Exposure time: 72 h

Acute aquatic toxicity- As- : Harmful to aquatic life.
essment

Chronic aquatic toxicity- As- : Harmful to aquatic life with long lasting effects.
essment

Persistence and degradability

Components:

12179-04-3:

Biodegradability : Remarks: No data available

Bioaccumulative potential

No data available

Mobility in soil

No data available

Other adverse effects

Product:

Additional ecological infor- : An environmental hazard cannot be excluded in the event of
mation unprofessional handling or disposal.
Harmful to aquatic life with long lasting effects.

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SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

- | | | |
|------------------------|---|--|
| Waste from residues | : | Dispose of in accordance with all applicable local, state and federal regulations.
For assistance with your waste management needs - including disposal, recycling and waste stream reduction, contact Uni-var Solutions ChemCare: 1-800-637-7922 |
| Contaminated packaging | : | Empty remaining contents.
Dispose of as unused product.
Do not re-use empty containers. |

SECTION 14. TRANSPORT INFORMATION

TDG (Transportation of Dangerous Goods): Not regulated as a dangerous good

IATA (International Air Transport Association): Not regulated as a dangerous good

IMDG-Code: Not regulated as a dangerous good

SECTION 15. REGULATORY INFORMATION

This product has been classified according to the hazard criteria of the Hazardous Products Regulations (HPR) and the SDS contains all of the information required by the HPR.

The components of this product are reported in the following inventories:

- | | | |
|-------|---|--|
| TSCA | : | On TSCA Inventory |
| DSL | : | All components of this product are on the Canadian DSL |
| AICS | : | On the inventory, or in compliance with the inventory |
| NZIoC | : | On the inventory, or in compliance with the inventory |
| ENCS | : | On the inventory, or in compliance with the inventory |
| KECI | : | On the inventory, or in compliance with the inventory |
| PICCS | : | On the inventory, or in compliance with the inventory |
| IECSC | : | On the inventory, or in compliance with the inventory |

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SECTION 16. OTHER INFORMATION

The information accumulated is based on the data of which we are aware and is believed to be correct as of the date hereof. Since this information may be applied under conditions beyond our control and with which we may be unfamiliar and since data made become available subsequently to the date hereof, we do not assume any responsibility for the results of its use. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances. This SDS has been prepared by Univar Solutions EHS Product Compliance Department (1-855-429-2661) SDSNA@univarsolutions.com.

Revision Date : 04/10/2025

Material number:

16193180, 16152904, 16174745, 16155316, 16154369, 16142682, 16142187

Key or legend to abbreviations and acronyms used in the safety data sheet			
ACGIH	American Conference of Government Industrial Hygienists	LD50	Lethal Dose 50%
AiIC	Australia Inventory of Industrial Chemicals	LOAEL	Lowest Observed Adverse Effect Level
DSL	Canada, Domestic Substances List	NFPA	National Fire Protection Agency
NDSL	Canada, Non-Domestic Substances List	NIOSH	National Institute for Occupational Safety & Health
CNS	Central Nervous System	NTP	National Toxicology Program
CAS	Chemical Abstract Service	NZIoC	New Zealand Inventory of Chemicals
EC50	Effective Concentration	NOAEL	No Observable Adverse Effect Level
EC50	Effective Concentration 50%	NOEC	No Observed Effect Concentration
EGEST	EOSCA Generic Exposure Scenario Tool	OSHA	Occupational Safety & Health Administration
EOSCA	European Oilfield Specialty Chemicals Association	PEL	Permissible Exposure Limit
EINECS	European Inventory of Existing Chemical Substances	PICCS	Philippines Inventory of Commercial Chemical Substances
MAK	Germany Maximum Concentration Values	PRNT	Presumed Not Toxic
GHS	Globally Harmonized System	RCRA	Resource Conservation Recovery Act
>=	Greater Than or Equal To	STEL	Short-term Exposure Limit
IC50	Inhibition Concentration 50%	SARA	Superfund Amendments and Reauthorization Act.
IARC	International Agency for Research on Cancer	TLV	Threshold Limit Value
IECSC	Inventory of Existing Chemical Substances in China	TWA	Time Weighted Average
ENCS	Japan, Inventory of Existing and New Chemical Substances	TSCA	Toxic Substance Control Act
KECI	Korea, Existing Chemical Inventory	UVCB	Unknown or Variable Composition, Complex Reaction Products, and Biological Materials
<=	Less Than or Equal To	WHMIS	Workplace Hazardous Materials Information System
LC50			Lethal Concentration 50%

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