

Safety Data Sheet

Sodium Borate

Section 1 - Chemical Product and Company Identification

SDS Name: Sodium Borate

Catalog Numbers: SO-822

Company Identification: Transene Company, Inc., DBA ROWLEY BIOCHEMICAL, Inc.
10 ELECTRONICS AVENUE
DANVERS, MA 01923

For information, call: 978-739-4883

Emergency Number: 800-424-9300

For CHEMTREC assistance, call: 800-424-9300

Section 2 - Hazards Identification

GHS Classifications

H319-Serious eye damage/eye irritation: 2A

H332-Acute toxicity, inhalation: 4

H360-Reproductive toxicity: 1B

Pictograms or Hazard symbols and Hazard statement(s):



Signal Word: Danger

Hazard Statements:

H319-Causes serious eye irritation

H332-Harmful if inhaled

H360-May damage fertility or the unborn child

Precautionary Statements:

P201-Obtain special instructions before use.

P202-Do not handle until all safety precautions have been read and understood.

P261-Avoid breathing dust/fume/gas/mist/vapours/spray.

P264-Wash thoroughly after handling.
P271-Use only outdoors or in a well-ventilated area.
P280-Wear protective gloves/protective clothing/eye protection/face protection.
P304+P340-If inhaled: Remove person to fresh air and keep comfortable for breathing.
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.
P312-Call a Poison Center/doctor if you feel unwell.
P337+P313-If eye irritation persists: Get medical advice/attention.
P405-Store locked up.
P501-Dispose of contents/container in accordance with local/regional/national/international regulations.

Section 3 - Composition, Information on Ingredients

CAS#	Chemical Name	Percent
1303-96-4	Sodium Tetraborate Decahydrate	≥99.5

Section 4 - First Aid Measures

Eye Exposure: In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Get medical attention.

Dermal Exposure: In case of skin contact, flush with copious amounts of water for at least 15 minutes. Remove contaminated clothing and shoes. Get medical attention.

Oral Exposure: If swallowed, seek immediate medical advice. Do not induce vomiting. Rinse mouth with water and drink small quantities of water (stop if the exposed person feels sick as vomiting may be dangerous).

Inhalation Exposure: If inhaled, remove to fresh air. If breathing becomes difficult, call a physician.

Section 5 - Fire Fighting Measures

General Information: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating gases may be generated by thermal decomposition or combustion.

Extinguishing Media: Use dry chemical, carbon dioxide, dry sand, water spray or alcohol-resistant foam.

Hazardous Combustion Products: Borane/boron oxides, sodium oxides, irritating fumes and gases.

Flash Point: Not applicable

Autoignition Temperature: Not applicable

Explosion Limits, Lower: Not available

Upper: Not available

NFPA Rating: (estimated) Health: 2; Flammability: 0; Instability: 0

Section 6 - Accidental Release Measures

Procedure(s) of Personal Precaution(s):

Wear personal protective equipment. Do not ingest or inhale. Do not get on skin or clothing. Do not get in eyes. Ensure adequate ventilation. Avoid dust formation.

Methods for Cleaning up: Absorb with sand, earth, or vermiculite. Carefully sweep up and containerize for proper disposal. Avoid generating dusty conditions. Provide ventilation. Do not release to the environment. Do not release to drains.

Section 7 - Handling and Storage

Use care when handling. Wear personal protective equipment. Wash thoroughly after handling. Ensure adequate ventilation. Do not ingest or inhale. Do not get on skin or clothing. Do not get in eyes. Minimize dust generation and accumulation. Keep in a tightly closed container. Store in a cool, dry, and well-ventilated area. Keep away from incompatible materials.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls: Use explosion-proof ventilation equipment. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

Personal Protective Equipment

Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin: Wear appropriate protective gloves to prevent skin exposure.

Clothing: Wear appropriate protective clothing to prevent skin exposure.

Respirators: A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant a respirator's use.

Exposure Limits:

Chemical Name	ACGIH - TLV	NIOSH - IDLH	OSHA - PEL
Sodium Tetraborate Decahydrate CAS#1303-96-4	2 mg/m ³ TWA 6 mg/m ³ STEL	5 mg/m ³ TWA	10 mg/m ³ TWA (vacated)

Section 9 - Physical and Chemical Properties

Physical State: Crystalline Solid
Appearance: White
Odor: Odorless
Vapor Pressure: 0.213 hPa at 20°C (68°F)
Odor Threshold: Not available
Vapor Density: Not available
pH: 9.23-9.43 (5% Aqueous Solution)
Relative Density: 1.73 g/cm³ at 25°C (77°F)
Melting point/freezing point: 75°C (167°F)
Solubility: Soluble in water
Boiling Point: 320°C (608°F)
Flash Point: Not applicable
Evaporation Rate: Not available
Flammability (solid, gas): This product is not flammable.
Partition coefficient: n-octanol/water: Not applicable
Autoignition Temperature: Not applicable
Decomposition Temperature: 75°C (167°F)
Viscosity: Not available
Specific Gravity/Density: Not available

Section 10 - Stability and Reactivity

Chemical Stability: Stable under normal temperatures and pressures.
Conditions to Avoid: Incompatible materials. Avoid exposure to moisture. Avoid dust formation.
Incompatibilities with Other Materials: Strong oxidizing agents, strong acids, and finely powdered metals.
Hazardous Decomposition Products: Borane/boron oxides, sodium oxides, irritating fumes and gases.

Section 11 - Toxicological Information

CAS#1303-96-4 Sodium Tetraborate Decahydrate: RTECS#: VZ2275000

LD50 Oral: 2660 mg/kg (rat)
LD50 Dermal: >2000 mg/kg (rabbit)
LC50 Inhalation: 2.03 mg/L (rat)

Carcinogenicity: Sodium Tetraborate Decahydrate CAS#1303-96-4 is not listed by IARC, NTP, ACGIH, OSHA, or California Prop. 65.

Reproductive Effects: Experiments have shown reproductive toxicity effects on laboratory animals. Paternal effects include: testes, epididymis, and sperm duct. Maternal effects include: ovaries and fallopian tubes.

Information on the likely routes of exposure: Routes of entry anticipated: oral, dermal, inhalation, and eye.

Epidemiology: Not available.

Teratogenicity: May cause harm to the unborn child.

Reproductive Effects: May damage fertility or the unborn child.

Developmental Effects: Not available.

Neurotoxicity: Not available.

Mutagenicity: Not available.

Specific Target Organ Toxicity, Single Exposure: Not available.

Specific Target Organ Toxicity, Repeated Exposure: Not available.

Symptoms associated with exposure: May damage fertility. May cause harm to the unborn child. Although no specific data is available, eye exposure may cause irritation, redness, itching, pain. Skin exposure may cause irritation, redness, dermatitis. Ingestion may cause irritation, nausea, vomiting, diarrhea. Inhalation may cause respiratory tract irritation and cough.

The toxicological properties of this material have not been thoroughly investigated.

Section 12 - Ecological Information

Ecotoxicity: Do not release to the environment. Do not release to drains.

CAS#1303-96-4 Sodium Tetraborate Decahydrate:

LC50, freshwater fish: 708 mg/L 96h (pimephales promelas)(fathead minnow)

EC50, freshwater algae: 158 mg/L 96h

LC50, water flea: 1085-1402 mg/L 48h

Persistence and degradability: Persistence is unlikely based on available information.

Bio-accumulative potential: Bioaccumulation is not expected.

Mobility: Will likely be mobile in the environment due to its water solubility.

Section 13 - Disposal Considerations

DISPOSAL: Dispose of in accordance with all federal, state, and local regulations.

Section 14 - Transport Information

DOT

Non-Regulated

Section 15 – Regulatory Information

Canada Regulatory Information

WHMIS Classification: This product has been classified in accordance with the hazard criteria of the CPR, and the SDS contains all the information required by the CPR.

Section 16 - Additional Information

SDS Creation Date: 1-8-2010

Revision #1: 12-2-14 RC

Revision #2: 9-16-22

Revision #3: 3-1-24

Revision #4: 1-5-26

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