

# Safety Data Sheet

## Sodium Borate, 0.5% Aqueous

### Section 1 - Chemical Product and Company Identification

**SDS Name:** Sodium Borate, 0.5% Aqueous

**Catalog Numbers:** SO-592

**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

H360-Reproductive toxicity: 1B

#### Pictograms or Hazard symbols and Hazard statement(s):



Signal Word: Danger

#### Hazard Statements:

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.

P280-Wear protective gloves/protective clothing/eye protection/face protection.

P308+P313-If exposed or concerned: 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	0.5 w/v
7732-18-5	Water	Balance

### 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, get 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 available

**Autoignition Temperature:** Not available

**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.

**Methods for Cleaning up:** Absorb with sand, earth, or vermiculite. Carefully sweep up and containerize for proper disposal. 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. Protect from air. 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 <sup>3</sup> TWA 6 mg/m <sup>3</sup> STEL	5 mg/m <sup>3</sup> TWA	10 mg/m <sup>3</sup> TWA (vacated)

## Section 9 - Physical and Chemical Properties

**Physical State:** Liquid  
**Appearance:** Clear, colorless  
**Odor:** Odorless  
**Vapor Pressure:** Not available  
**Odor Threshold:** Not available  
**Vapor Density:** Not available  
**pH:** Approx. 9.1-9.3  
**Relative Density:** Not available  
**Melting point/freezing point:** Not available  
**Solubility:** Soluble in water  
**Boiling Point:** Not available  
**Flash Point:** Not available  
**Evaporation Rate:** Not available  
**Flammability (solid, gas):** Not available  
**Partition coefficient: n-octanol/water:** Not available  
**Autoignition Temperature:** Not available  
**Decomposition Temperature:** Not available  
**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.  
**Incompatibilities with Other Materials:** Strong oxidizing agents, strong acids, metallic salts, 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
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**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:** Not available.  
**Bio-accumulative potential:** Not available.  
**Mobility:** Will likely be mobile in the environment due to its water solubility.

Section 13 - Disposal Considerations
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**DISPOSAL:** Dispose of in accordance with all federal, state, and local regulations.

Section 14 - Transport Information
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**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:** 4-25-14 YM

**Revision #2:** 12-1-21

**Revision #3:** 3-1-24

**Revision #4:** 1-5-26

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