

## Material Safety Data Sheet

Sodium Borate Solution (0.165N)

A.C.# 89933

## Section 1 - Chemical Product and Company Identification

**MSDS Name:** Sodium Borate Solution (0.165N)**Catalog Numbers:** NC9432558, NC9504414, NC9851006, XXNABOR10LI, XXNABOR20LI**Synonyms:** None.**Company Identification:**

Fisher Scientific

1 Reagent Lane

Fair Lawn, NJ 07410

**For information, call:** 201-796-7100**Emergency Number:** 201-796-7100**For CHEMTREC assistance, call:** 800-424-9300**For International CHEMTREC assistance, call:** 703-527-3887

## Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name	Percent	EINECS/ELINCS
1303-96-4	Sodium borate	3.3	unlisted
7732-18-5	Water	Balance	231-791-2

**Hazard Symbols:** None listed.**Risk Phrases:** None listed.

## Section 3 - Hazards Identification

## EMERGENCY OVERVIEW

Appearance: Not available. **Caution!** May cause eye and skin irritation. May cause respiratory and digestive tract irritation. May cause central nervous system depression. May cause kidney damage. May cause blood abnormalities.

**Target Organs:** Kidneys, central nervous system.

**Potential Health Effects**

**Eye:** May cause eye irritation.

**Skin:** May cause skin irritation.

**Ingestion:** Symptoms may include: headache, excitement, fatigue, nausea, vomiting, stupor, and coma. May cause gastrointestinal irritation with nausea, vomiting and diarrhea. May cause kidney damage. May cause central nervous system depression, characterized by excitement, followed by headache, dizziness, drowsiness, and nausea. Advanced stages may cause collapse, unconsciousness, coma and possible death due to respiratory failure.

**Inhalation:** May cause respiratory tract irritation.

**Chronic:** Chronic ingestion may cause effects similar to those of acute ingestion.

## Section 4 - First Aid Measures

**Eyes:** Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.

**Skin:** Get medical aid if irritation develops or persists. Flush skin with plenty of soap and water.

**Ingestion:** If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to unconscious person. Get medical aid immediately.

**Inhalation:** Remove from exposure and move to fresh air immediately. Get medical aid if cough or other symptoms appear.

**Notes to Physician:** None

## 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 and highly toxic gases may be generated by thermal decomposition or combustion. Use extinguishing media appropriate to the surrounding fire. Substance is noncombustible.

**Extinguishing Media:** Substance is nonflammable; use agent most appropriate to extinguish surrounding fire.

**Flash Point:** Not available

**Autoignition Temperature:** Not available.

**Explosion Limits, Lower:** Not available.

**Upper:** Not available.

**NFPA Rating:** (estimated) Health: 1; Flammability: 0; Instability: 0

## Section 6 - Accidental Release Measures

**General Information:** Use proper personal protective equipment as indicated in Section 8.

**Spills/Leaks:** Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Avoid runoff into storm sewers and ditches which lead to waterways. Clean up spills immediately, observing precautions in the Protective Equipment section. Provide ventilation.

## Section 7 - Handling and Storage

**Handling:** Wash thoroughly after handling. Use with adequate ventilation. Avoid contact with eyes, skin, and clothing. Keep container tightly closed. Avoid ingestion and inhalation.

**Storage:** Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances.

## Section 8 - Exposure Controls, Personal Protection

**Engineering Controls:** Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

### Exposure Limits

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
Sodium borate	5 mg/m <sup>3</sup> TWA	5 mg/m <sup>3</sup> TWA	none listed
Water	none listed	none listed	none listed

**OSHA Vacated PELs:** Sodium borate: 10 mg/m<sup>3</sup> TWA Water: No OSHA Vacated PELs are listed for this

chemical.

### 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:** Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Always use a NIOSH or European Standard EN 149 approved respirator when necessary.

## Section 9 - Physical and Chemical Properties

**Physical State:** Liquid

**Appearance:** Not available.

**Odor:** Not available.

**pH:** Not available.

**Vapor Pressure:** Not available.

**Vapor Density:** Not available.

**Evaporation Rate:** Not available.

**Viscosity:** Not available.

**Boiling Point:** Not available.

**Freezing/Melting Point:** Not available.

**Decomposition Temperature:** Not available.

**Solubility:** Not available.

**Specific Gravity/Density:** Not available.

**Molecular Formula:** Not available.

**Molecular Weight:** Not available.

## Section 10 - Stability and Reactivity

**Chemical Stability:** Stable.

**Conditions to Avoid:** Incompatible materials.

**Incompatibilities with Other Materials:** Zirconium, strong acids, metallic salts.

**Hazardous Decomposition Products:** Toxic fumes of sodium oxide, oxides of boron.

**Hazardous Polymerization:** Has not been reported

## Section 11 - Toxicological Information

**RTECS#:**

**CAS# 1303-96-4:** VZ2275000

**CAS# 7732-18-5:** ZC0110000

**LD50/LC50:**

**CAS# 1303-96-4:**

Oral, mouse: LD50 = 2 gm/kg;

Oral, rat: LD50 = 2660 mg/kg;

**CAS# 7732-18-5:**

Oral, rat: LD50 = >90 mL/kg;

**Genotoxicity:**

**CAS# 1303-96-4:** Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA. **CAS# 7732-18-5:** Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA.

**Epidemiology:** No data available.

**Teratogenicity:** No data available.

**Reproductive Effects:** Experimental reproductive effects have been observed for sodium borate.

**Neurotoxicity:** No data available.

**Mutagenicity:** No data available.

**Other Studies:** No data available.

## Section 12 - Ecological Information

**Ecotoxicity:** No data available. Actual aquatic effects: 96-hour LC50 for fathead minnow: GT 1000 mg/L 96-hour LC50 for water flea: 260mg/L This chemical has no biological oxygen demand, and it is not expected to cause oxygen depletion in aquatic systems. This chemical has a high potential to affect the germination of some plants. It has a moderate potential to affect secondary waste treatment microorganisms and the growth of some plants. It has a low potential to affect aquatic organisms.

**Environmental:** This chemical is not likely to bioconcentrate.

**Physical:** No data reported.

**Other:** No data reported.

## Section 13 - Disposal Considerations

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

**RCRA P-Series:** None listed.

**RCRA U-Series:** None listed.

## Section 14 - Transport Information

	US DOT	IATA	RID/ADR	IMO	Canada TDG
<b>Shipping Name:</b>	No information available.				No information available.
<b>Hazard Class:</b>					
<b>UN Number:</b>					
<b>Packing Group:</b>					

## Section 15 - Regulatory Information

### US FEDERAL

#### TSCA

CAS# 1303-96-4 is listed on the TSCA inventory.

CAS# 7732-18-5 is listed on the TSCA inventory.

#### Health & Safety Reporting List

None of the chemicals are on the Health & Safety Reporting List.

#### Chemical Test Rules

None of the chemicals in this product are under a Chemical Test Rule.

#### Section 12b

None of the chemicals are listed under TSCA Section 12b.

#### TSCA Significant New Use Rule

None of the chemicals in this material have a SNUR under TSCA.

#### **SARA**

#### **CFR/CLP Hazardous Substances and corresponding RQs**

None of the chemicals in this material have an RQ.

#### **SARA Section 302 Extremely Hazardous Substances**

None of the chemicals in this product have a TPQ.

#### **SARA Codes**

CAS # 1303-96-4: chronic.

#### **Section 313**

No chemicals are reportable under Section 313.

#### **Clean Air Act:**

This material does not contain any hazardous air pollutants. This material does not contain any Class 1 Ozone depleters. This material does not contain any Class 2 Ozone depleters.

#### **Clean Water Act:**

None of the chemicals in this product are listed as Hazardous Substances under the CWA. None of the chemicals in this product are listed as Priority Pollutants under the CWA. None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

#### **OSHA:**

None of the chemicals in this product are considered highly hazardous by OSHA.

#### **STATE**

CAS# 1303-96-4 can be found on the following state right to know lists: California, New Jersey, Pennsylvania, Minnesota, Massachusetts.

CAS# 7732-18-5 is not present on state lists from CA, PA, MN, MA, FL, or NJ.

California No Significant Risk Level: None of the chemicals in this product are listed.

## **European/International Regulations**

### **European Labeling in Accordance with EC Directives**

#### **Hazard Symbols:**

None available.

#### **Risk Phrases:**

#### **Safety Phrases:**

#### **WGK (Water Danger/Protection)**

CAS# 1303-96-4: 1

CAS# 7732-18-5: No information available.

#### **Canada - DSL/NDSL**

CAS# 1303-96-4 is listed on Canada's DSL List.

CAS# 7732-18-5 is listed on Canada's DSL List.

#### **Canada - WHMIS**

This product has a WHMIS classification of D2B.

#### **Canadian Ingredient Disclosure List**

CAS# 1303-96-4 is listed on the Canadian Ingredient Disclosure List.

#### **Exposure Limits**

CAS# 1303-96-4: OEL-AUSTRALIA:TWA 5 mg/m<sup>3</sup> OEL-BELGIUM:TWA 5 mg/m<sup>3</sup>  
OEL-DENMARK:TWA 5 mg/m<sup>3</sup> OEL-FRANCE:TWA 5 mg/m<sup>3</sup> OEL-THE NETHERLANDS:TWA 5 mg/m<sup>3</sup>  
OEL-SWEDEN:TWA 2 mg/m<sup>3</sup>;STEL 5 mg/m<sup>3</sup>;Skin OEL-SWITZERLAND:TWA 5 mg/m<sup>3</sup>  
OEL-UNITED KINGDOM:TWA 5 mg/m<sup>3</sup> OEL IN BULGARIA, COLOMBIA, JORDAN, KOREA check ACGIH TLV  
OEL IN NEW ZEALAND, SINGAPORE, VIETNAM check ACGI TLV

## Section 16 - Additional Information

**MSDS Creation Date:** 2/01/1999

**Revision #3 Date:** 3/18/2003

*The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Fisher be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Fisher has been advised of the possibility of such damages.*