

# FLINN SCIENTIFIC, INC.

## Material Safety Data Sheet (MSDS)

MSDS #: 712.00

Revision Date: November 28, 2012

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### SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

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#### Sodium Borate, Tetra

Flinn Scientific, Inc. P.O. Box 219 Batavia, IL 60510 (800) 452-1261  
CHEMTREC Emergency Phone Number: (800) 424-9300

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### SECTION 2 — COMPOSITION, INFORMATION ON INGREDIENTS

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Sodium borate, tetra  
Synonym: Borax; Sodium pyroborate; Sodium tetraborate decahydrate  
CAS#: 1303-96-4

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### SECTION 3 — HAZARDS IDENTIFICATION

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White crystals or powder. Odorless.  
Slightly toxic by ingestion, inhalation, and skin absorption. Irritating to body tissues. Avoid all body tissue contact.

#### FLINN AT-A-GLANCE

Health-1  
Flammability-0  
Reactivity-0  
Exposure-1  
Storage-1

0 is low hazard, 3 is high hazard

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### SECTION 4 — FIRST AID MEASURES

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Call a physician and seek medical attention for further treatment, observation, and support after first aid.  
Inhalation: Remove to fresh air at once. If breathing has stopped, give artificial respiration immediately.  
Eye or External: Immediately flush with fresh water for at least 15 minutes.  
Internal: Rinse mouth. Give large quantities of water for dilution. Call a physician or poison control at once.

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### SECTION 5 — FIRE FIGHTING MEASURES

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Nonflammable solid.

NFPA CODE  
None  
established

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### SECTION 6 — ACCIDENTAL RELEASE MEASURES

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Restrict unprotected personnel from area. Sweep up, place in sealed bag or container and dispose. Ventilate area and wash spill site after material pickup is complete. See Sections 8 and 13 for further information.

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### SECTION 7 — HANDLING AND STORAGE

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Flinn Suggested Chemical Storage Pattern: Inorganic #8. Store with borates, chromates, manganates and permanganates. Store in a cool dry place. Deliquescent, store in Flinn Chem-Saf Bag.

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### SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION

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Avoid contact with eyes, skin, and clothing. Wear chemical splash goggles, chemical-resistant gloves, and chemical-resistant apron. Use ventilation to keep airborne concentrations below exposure limits. Always wear a NIOSH-approved respirator with proper cartridges or a positive pressure, air-supplied respirator when handling this material in emergency situations (spill or fire).  
Exposure guidelines: TWA 5 mg/m<sup>3</sup> (NIOSH/ACGIH)

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**SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES**

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White, odorless crystals or powder.

Solubility: Soluble in water and glycerol; not alcohol.

Formula:  $\text{Na}_2\text{B}_4\text{O}_7 \cdot 10\text{H}_2\text{O}$ 

Formula weight: 381.373

Melting point: 75 °C (decomposes)

Specific gravity: 1.73

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**SECTION 10 — STABILITY AND REACTIVITY**

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Shelf life: Material efflorescent. Store in a Flinn Chem-Saf bag.

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**SECTION 11 — TOXICOLOGICAL INFORMATION**

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Acute effects: Irritant

Chronic effects: N.A.

Target organs: Central nervous system, kidneys

ORL-RAT  $\text{LD}_{50}$ : 2660 mg/kgIHL-RAT  $\text{LC}_{50}$ : N.A.SKN-RBT  $\text{LD}_{50}$ : >2 g/kg

N.A. = Not available, not all health aspects of this substance have been fully investigated.

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**SECTION 12 — ECOLOGICAL INFORMATION**

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Data not yet available.

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**SECTION 13 — DISPOSAL CONSIDERATIONS**

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Please review all federal, state and local regulations that may apply before proceeding.

Flinn Suggested Disposal Method #26a is one option.

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**SECTION 14 — TRANSPORT INFORMATION**

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Shipping name: Not regulated

Hazard class: N/A

UN number: N/A

N/A = Not applicable

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**SECTION 15 — REGULATORY INFORMATION**

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TSCA-listed, EINECS-listed (215-540-4).

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**SECTION 16 — OTHER INFORMATION**

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**Consult your copy of the *Flinn Science Catalog/Reference Manual*  
for additional information about laboratory chemicals.**