



## Material Safety Data Sheet

Date Printed: 06/16/2010  
Date Updated: 06/05/2009  
Version 1.70

### Section 1 - Product and Company Information

**Product Name** Borax Solution  
**Product Number** HT1002  
**Brand** Sigma Chemical

**Company Address** Sigma-Aldrich  
3050 Spruce Street  
**City, State, Zip, Country** SAINT LOUIS, MO 63103 US  
**Technical Phone:** 800-325-5832  
**Fax:** 800-325-5052

**Emergency Phone:** 314-776-6555

### Section 2 - Composition/Information on Ingredient

| <u>Substance Name</u> | <u>CAS #</u> | <u>SARA 313</u> | <u>EC no</u> | <u>Annex I Index Number</u> |
|-----------------------|--------------|-----------------|--------------|-----------------------------|
| BORAX SOLUTION        | None         | No              |              |                             |

**Formula**  
**Synonyms**

### Section 3 - Hazards Identification

#### Emergency Overview

Caution: Avoid contact and inhalation.

#### HMIS Rating

Health: 1      Flammability: 0      Reactivity: 0

#### NFPA Rating

Health: 1      Flammability: 0      Reactivity: 0

For additional information on toxicity, please refer to Section 11.

### Section 4 - First Aid Measures

#### Oral Exposure

If swallowed, wash out mouth with water provided person is conscious. Call a physician.

#### Inhalation Exposure

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

#### Dermal Exposure

In case of contact, immediately wash skin with soap and copious amounts of water.

#### 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. Call a physician.

### Section 5 - Fire Fighting Measures

**Autoignition Temp:** N/A

#### Extinguishing Media

**Suitable**  
Water spray, Carbon dioxide, dry chemical powder, or appropriate foam.

#### Firefighting

##### Protective Equipment

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

##### Specific Hazard(s)

Emits toxic fumes under fire conditions.

### Section 6 - Accidental Release Measures

#### Procedure(s) of Personal Precaution(s)

Exercise appropriate precautions to minimize direct contact with skin or eyes and prevent inhalation of dust.

#### Methods for Cleaning Up

Sweep up, place in a bag and hold for waste disposal. Avoid raising dust. Ventilate area and wash spill site after material pickup is complete.

### Section 7 - Handling and Storage

#### Handling

##### User Exposure

Avoid inhalation. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure.

#### Storage

##### Suitable

Keep lightly closed.

### Section 8 - Exposure Controls / PPE

#### Engineering Controls

Safety shower and eye bath. Mechanical exhaust required.

#### Personal Protective Equipment

##### Respiratory

Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks.

##### Hand

Protective gloves.

##### Eye

Chemical safety goggles.

#### General Hygiene Measures

Wash thoroughly after handling.

### Section 9 - Physical/Chemical Properties

#### Appearance

##### Physical State

Liquid

Sigma Chemical - HT1002

Page 2

Sigma-Aldrich Corporation  
www.sigma-aldrich.com

RECEIVED  
JUN 22 2010  
Safety & Environmental  
Health

|                       |     |
|-----------------------|-----|
| pH                    | N/A |
| BP/BP Range           | N/A |
| MP/MP Range           | N/A |
| Freezing Point        | N/A |
| Vapor Pressure        | N/A |
| Vapor Density         | N/A |
| Saturated Vapor Conc. | N/A |
| SG/Density            |     |
| Bulk Density          | N/A |
| Odor Threshold        | N/A |
| Volatile%             | N/A |
| VOC Content           | N/A |
| Water Content         | N/A |
| Solvent Content       | N/A |
| Evaporation Rate      | N/A |
| Viscosity             | N/A |
| Partition Coefficient | N/A |
| Decomposition Temp.   | N/A |
| Flash Point °F        | N/A |
| Flash Point °C        | N/A |
| Explosion Limits      | N/A |
| Flammability          | N/A |
| Autoignition Temp     | N/A |
| Solubility            | N/A |

N/A = not available

## Section 10 - Stability and Reactivity

### Stability

#### Stable

Stable.

#### Reactions to Avoid

Reacts violently with:

#### Materials to Avoid

Potassium, Acid anhydrides

### Hazardous Decomposition Products

#### Hazardous Decomposition Products

Boron oxides.

### Hazardous Polymerization

#### Hazardous Polymerization

Will not occur.

## Section 11 - Toxicological Information

### Route of Exposure

#### Skin Contact

May cause skin irritation.

#### Skin Absorption

May be harmful if absorbed through the skin.

#### Eye Contact

May cause eye irritation.

#### Inhalation

May be harmful if inhaled. Material may be irritating to mucous membranes and upper respiratory tract.

### Ingestion

May be harmful if swallowed.

### Signs and Symptoms of Exposure

Toxicity reported for borates in humans: ingestion or absorption may cause nausea, vomiting, diarrhea, abdominal cramps, and erythematous lesions on the skin and mucous membranes. Other symptoms include: circulatory collapse, tachycardia, cyanosis, delirium, convulsions, and coma. Death has been reported to occur in infants from less than 5 grams and in adults from 5 to 20 grams.

RTECS Number: N/A

## Section 12 - Ecological Information

No data available.

## Section 13 - Disposal Considerations

### Appropriate Method of Disposal of Substance or Preparation

Contact a licensed professional waste disposal service to dispose of this material.

Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Observe all federal, state, and local environmental regulations.

## Section 14 - Transport Information

### DOT

Proper Shipping Name: Corrosive liquids, n.o.s.

UN#: 1760

Class: 8

Packing Group: Packing Group II

Hazard Label: Corrosive

PIH: Not PIH

### IATA

Proper Shipping Name: Corrosive liquid, n.o.s.

IATA UN Number: 1760

Hazard Class: 8

Packing Group: II

## Section 15 - Regulatory Information

### EU Additional Classification

Safety Statements S: 24/25

Avoid contact with skin and eyes.

### US Classification and Label Text

#### US Statements

Caution: Avoid contact and inhalation.

### United States Regulatory Information

SARA Listed: No

### Canada Regulatory Information

#### WHMIS Classification

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

DSL: No

NDSL: No

## Section 16 - Other Information

### Disclaimer

For R&D use only. Not for drug, household or other uses.

**Warranty**

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. SigmaAldrich Inc., shall not be held liable for any damage resulting from handling or fom contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale. Copyright2010 Sigma-Aldrich Co. License granted to make unlimited paper copies for internal use only.

