

# MATERIAL SAFETY DATA SHEET

Boric Acid

## SECTION 1 . Product and Company Identification

Product Name and Synonym: Boric Acid  
Product Code: B4202  
Material Uses:  
Manufacturer: Science Stuff  
1104 Newport Ave  
Austin, TX 78753  
(512) 837-6020  
Entry Date : 5/28/2013  
Print Date: 5/28/2013  
24 Hour Emergency Assistance : Chemtrec 800-424-9300  
Canutec 613-996-6666

Health:	2			
Flammability:	0			
Reactivity:	0			
Hazard Rating:				
Least	Slight	Moderate	High	Extreme
0	1	2	3	4
NA=Not Applicable		NE=Not Established		

## SECTION 2 HAZARD IDENTIFICATION

Harmful if swallowed. May cause irritation. Avoid breathing vapors, or dusts. Use with adequate ventilation. Avoid contact with eyes, skin, and clothes. Wash thoroughly after handling. Keep container closed.

### WARNING!

#### Emergency Overview:

May impair fertility. May cause harm to the unborn child. Irritating to eyes and skin. May cause irritation of respiratory tract. May cause central nervous system effects. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Appearance: White  
Physical State: Powder  
Odor: Odorless

Target Organs: Liver, Kidney, Eyes, Skin, Central nervous system (CNS), Blood, Gastrointestinal (GI), Reproductive System

#### Potential Health Effects

##### Acute Effects Principle Routes of Exposure

Eyes: Irritating to eyes.

Skin: Irritating to skin. May be harmful in contact with skin. Chronic exposure may cause dermatitis.

Inhalation: May cause irritation of respiratory tract. May be harmful if inhaled, inhalation may cause central nervous system effects.

Ingestion: May be harmful if swallowed. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Chronic Effects: Adverse reproductive effects have occurred in humans. May impair fertility. May cause harm to the unborn child. May cause adverse liver effects. May cause adverse kidney effects.

Aggravated Medical Conditions: No information available

## SECTION 3 MIXTURE COMPONENTS

Boric Acid

SARA 313	Component	CAS Number	Percent Comp.	Dimension	Exposure Limits
<input type="checkbox"/>	Boric Acid	CAS# 10043-35-3	100 %	W/W	OSHA PEL 15 mg/mf (total dust)

**SECTION 4 FIRST AID MEASURES**

Harmful if swallowed. May cause irritation. Avoid breathing vapors, or dusts. Use with adequate ventilation. Avoid contact with eyes, skin, and clothes. Wash thoroughly after handling. Keep container closed.

FIRST AID: SKIN: Remove contaminated clothing. Wash exposed area with soap and water. If symptoms persist, seek medical attention

EYES: Wash eyes with plenty of water for at least 15 minutes, lifting lids occasionally. Seek Medical Aid. INHALATION: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen

INGESTION: If swallowed, induce vomiting immediately after giving two glasses of water. Never give anything by mouth to an unconscious person.

**SECTION 5 FIRE FIGHTING MEASURES**

Fire Extinguisher Type: Any means suitable for extinguishing surrounding fire

Fire / Explosion Hazards: None Known.

Fire Fighting Procedure: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and clothing.

**SECTION 6 ACCIDENTAL RELEASE MEASURES**

Sweep up and place in suitable (fiberboard) containers for reclamation or later disposal.

Personal Precautions: Use personal protective equipment. Ensure adequate ventilation. Avoid dust formation. Do not get in eyes, on skin, or on clothing.

Environmental Precautions: Should not be released into the environment.

Methods for Containment and Clean Up: Sweep up or vacuum up spillage and collect in suitable container for disposal. Avoid dust formation.

**SECTION 7 HANDLING AND STORAGE**

Store in a cool dry well ventilated area. Keep away from heat and flame. Do not get in eyes, on skin, or on clothing.

**SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION**

Respiratory Protection: NIOSH/MSHA-approved respirator

Ventilation

Local Exhaust

Mechanical

Protective Gloves: Wear appropriate gloves to prevent skin exposure

Eye Protection: Safety Glasses w/  
Side Shields

Other Protective Equipment: Wear appropriate clothing to prevent skin exposure

Boric Acid

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ACGIH TLV (United States, 1/2006). Notes: Refers to Appendix A – Carcinogens. Inhalable fraction. See Appendix C, paragraph A. Inhalable Particulate Mass TLV's (IPM-TLVs) for those materials that are hazardous when deposited anywhere in the respiratory tract. ACGIH 2005 Adoption  
STEL: 6 mg/m<sup>3</sup> 15 minute(s)  
TWA: 2 mg/m<sup>3</sup> 8 hour(s)

Personal Protective Equipment

Eye/face Protection: 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 EN166.

Skin and Body Protection: Wear appropriate protective gloves and clothing to prevent skin exposure.

Respiratory Protection: Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

**SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES**

Melting Point:	170.9 Deg C	Percent Volatile by Volume:	0
Boiling Point:	Information not available	Evaporation Rate	00
Vapor Pressure:	negligible @20°C	Evaporation Standard	
Vapor Density:	Information not available	Auto Ignition Temp	info not available
Solubility in Water:	4.7% @ 20 Deg C	Lower Flamm. Limit in Air	info not available
Appearance /Odors:	White powder	Upper Flamm. Limit in Air	info not available
Flash Point:	None		
Specific Gravity:	1.51		

**SECTION 10 STABILITY AND REACTIVITY INFORMATION**

Stability:	Stable
Conditions to Avoid:	Avoid contact with incompatible materials.
Materials to Avoid:	Oxidizing agents, metals, bases, amines.
Hazardous Decomposition Products:	Not known to occur
Hazardous polymerization:	Will Not Occur
Conditions to Avoid:	None known

**SECTION 11 Toxicological Information**

Acute Toxicity

Component: Boric Acid (H3BO3)  
LD50 Oral 2660 mg/kg (Rat)  
LD50 Dermal 2000 mg/kg (Rabbit)

## Boric Acid

LC50 Inhalation 0.16 mg/L (Rat) 4h

Irritation: Irritating to the eyes and skin.  
Toxicologically Synergistic Products: No information available.

Chronic Toxicity

Carcinogenicity: The table below indicates whether each agency has listed any ingredient as a carcinogen.

ACGIH: A1- Known Human carcinogen.  
A2- Suspected Human carcinogen.  
A3- Animal carcinogen.  
ACGIH:

Sensitization: No information available

Mutagenic Effects: Mutagenic effects have occurred in microorganisms.

Reproductive Effects: May cause harm to the unborn child. Developmental effects have occurred in experimental animals.

Teratogenicity: Teratogenic effects have occurred in experimental animals.

Other Adverse Effects: The toxicological properties have been fully investigated. See actual entry in RTECS for complete information.

Endocrine Disruptor Information: No information available

### SECTION 12 Ecological Information

Ecotoxicity: Do not empty into drains.

Component: Boric acid (H3BO3)

Freshwater Fish: *Gambusia affinis*: LC50: 5600 mg/L/96h

Water Flea: EC50 48 h 115.0 mg/L EC50 48 h 658 – 875 mg/L EC50 48 h 115.0mg/L

Mobility: Component Boric Acid (H3BO3) low Pow: -0.757

### SECTION 13 Disposal Considerations

Waste Disposal Methods: Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

### SECTION 14 Transport Information

DOT Classification: Not Regulated

DOT Regulations may change from time to time. Please consult the most recent D.O.T. regulations.

### SECTION 15 Regulatory Information

U.S. Federal Regulations

TSCA 12(b) Not applicable

SARA 311/312 Hazardous Categorization

Acute Health Hazard – No

Chronic Health Hazard – No

Fire Hazard – No

Sudden Release of Pressure Hazard – No

Reactive Hazard – No

Clean Water Act: Not Applicable

Clean Air Act: Not applicable

OSHA: Not applicable

CERCLA: Not applicable

California Proposition 65: This product does not contain any Proposition 65 chemicals.

State Right-To-Know

U.S. Department of Transportation

Reportable Quantity (RQ): N

DOT Marine Pollutant: N

DOT Severe Marine Pollutant: N

## Boric Acid

U.S. Department of Homeland Security  
This product does not contain any DHS chemicals.

Other International Regulations

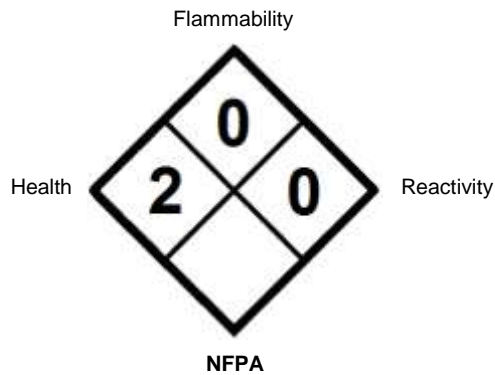
Mexico – Grade: No information available

Canada

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.

WHMIS Hazard Class  
D2A very toxic materials

### SECTION 16 Additional Information



#### Revisions

3/12/2013	0.1	Revised to 16 sections LS
3/4/2009	0	Creation date LS

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