



Material Safety Data Sheet

Boric acid 2-4% (with and without indicator), Boron AA Standard

Section 1 - Chemical Product and Company Identification

MSDS Name:

Boric acid 2-4% (with and without indicator), Boron AA Standard

Catalog Numbers:

LC11720, LC11740, LC11750, LC11770, LC11780

Synonyms:

None

Company Identification:

LabChem Inc
200 William Pitt Way
Pittsburgh, PA 15238

Company Phone Number:

(412) 826-5230

Emergency Phone Number:

(800) 424-9300

CHEMTREC Phone Number:

(800) 424-9300

Section 2 – Composition, Information on Ingredients

CAS#	Chemical Name:	Percent
7732-18-5	Water	balance
10043-35-3	Boric Acid	2-5
845-10-3	Methyl Red Sodium Salt	<0.1
61-73-4	Methylene Blue	<0.1
67763-24-0	Bromocresol Green	<0.1

Section 3 - Hazards Identification

Emergency Overview

Appearance:*LC11720, LC11740, LC11780- clear, colorless solution**LC11750- clear, red solution**LC11770- clear, purple solution***Caution.** May impair fertility. May cause eye and skin irritation. May cause respiratory tract irritation.**Target Organs:** *Blood, kidneys, heart, central nervous system, liver, spleen, gastrointestinal system, eyes, reproductive system, skin.***Potential Health Effects****Eye:**

May cause eye irritation.



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Skin:

May cause skin irritation. May be harmful if absorbed through the skin.

Ingestion:

May cause irritation of the digestive tract. May cause nausea and vomiting. May be harmful if swallowed. CNS effects (excitement or depression, lethargy, headache, coma, seizures), dehydration, arrhythmias, shock and metabolic acidosis have been reported in extreme adult and pediatric cases.

Inhalation:

May cause respiratory tract irritation. May be harmful if inhaled.

Chronic:

Prolonged or repeated skin contact may cause dermatitis. May cause liver and kidney damage. Repeated exposure may cause central nervous system damage or damage to the spleen. Adverse reproductive effects have been reported in animals. Laboratory experiments have resulted in mutagenic effects. Chronic exposure may cause blood effects. May impair fertility.

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 at once. Do NOT allow victim to rub or keep eyes closed.

Skin:

Get medical aid at once. Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse.

Ingestion:

Call a poison control center. If swallowed, do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical aid at once.

Inhalation:

Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid. Do NOT use mouth-to-mouth resuscitation.

Notes to Physician:

Treat symptomatically and supportively.

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.

Extinguishing Media:

For small fires, use dry chemical, carbon dioxide, water spray or alcohol-resistant foam.

Autoignition Temperature:

Not applicable.

Flash Point:

Not applicable.

NFPA Rating:

Health- 2, Flammability- 0, Instability- 1.



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Explosion Limits:

Lower: n/a Upper: n/a

Section 6 - Accidental Release Measures

General Information:

Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks:

Absorb spills with absorbent (vermiculite, sand, fuller's earth) and place in suitable containers labeled for later disposal.

Section 7 - Handling and Storage

Handling:

Do not get in eyes, on skin, or on clothing. Do not ingest or inhale. Wash thoroughly after handling.

Storage:

Store in a cool, dry place. Store in a tightly closed container.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls:

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations below the permissible exposure limits.

Exposure Limits:

Chemical Name:	ACGIH	NIOSH	OSHA
Water	none listed	none listed	none listed
Boric acid	2 mg/m ³ TWA (inhalable fraction, listed under Borate compounds, inorganic); 6 mg/m ³ STEL (inhalable fraction, listed under Borate compounds, inorganic)	none listed	none listed
Methyl red	none listed	none listed	none listed
Methylene blue	none listed	none listed	none listed
Bromocresol green	none listed	none listed	none listed

OSHA Vacated PELs:

None.

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 gloves to prevent skin exposure.



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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. 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

Physical State:	Liquid
Color:	Colorless, red, or purple
Odor:	Odorless
pH:	Acidic
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 in water:	Soluble
Specific Gravity/Density:	Not available
Molecular Formula:	Not available
Molecular Weight:	Not available

Section 10 - Stability and Reactivity

Chemical Stability:

Stable under normal temperatures and pressures.

Conditions to Avoid:

Incompatible materials, excess heat.

Incompatibilities with Other Materials:

Caustics (e.g. ammonia, ammonium hydroxide, calcium hydroxide, potassium hydroxide, sodium hydroxide), acetic anhydride, alkali carbonates, strong oxidizing agents.

Hazardous Decomposition Products:

Carbon monoxide, carbon dioxide, oxides of boron.

Hazardous Polymerization:

Has not been reported.

Section 11 - Toxicological Information

RTECS:

CAS# 7732-18-5: ZC0110000

CAS# 10043-35-3: ED4550000; ED4560000

LD50/LC50:

CAS# 7732-18-5:

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



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CAS# 10043-35-3:

Oral, mouse: LD50 = 3450 mg/kg;

Oral, rat: LD50 = 2660 mg/kg;

Oral, rat: LD50 = 2500 mg/kg

Carcinogenicity:

Not listed as a carcinogen by ACGIH, IARC, NIOSH, NTP, OSHA, or CA Prop 65.

Epidemiology:

No information found

Teratogenicity:

Teratogenic effects have occurred in experimental animals.

Reproductive:

Adverse reproductive effects have occurred in experimental animals.

Mutagenicity:

Mutation in microorganisms: See actual entry in RTECS for complete information.

Neurotoxicity:

No information found

Section 12 - Ecological Information

Ecotoxicity:

Water flea Daphnia: LC50 = 115.0-153.0 mg/L; 48 Hr.; Static Condition Fish: Rainbow trout: LC50=150mg B/L; 24-day; Fish: Goldfish: LC50=46mg B/L; 7-day; Mosquito fish (fresh water) TLm=1800 ppm/24H Mosquito fish (fresh water) TLm=1800 ppm/24H.

Environmental:

Boric acid is a water-soluble white powder that may, at high concentrations, cause damage to trees or vegetation by root absorption.

Physical:

No information available.

Other:

Do not empty into drains.

Section 13 - Disposal Considerations

Dispose of in accordance with Federal, State, and local regulations.

Section 14 - Transport Information

US DOT

Shipping Name: Not regulated.

Hazard Class:

UN Number:

Packing Group:



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Section 15 - Regulatory Information

US Federal

TSCA:

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

CAS# 10043-35-3 is listed on the TSCA Inventory.

SARA Reportable Quantities (RQ):

None of the components are on this list.

CERCLA/SARA Section 313:

None of the components are on this list.

OSHA - Highly Hazardous:

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

US State

State Right to Know:

None of the components are present on state lists from CA, PA, MN, MA, FL, or NJ.

California Regulations:

None.

European/International Regulations

Canadian DSL/NDSL:

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

CAS# 10043-35-3 is listed on Canada's DSL List.

Canada Ingredient Disclosure List:

CAS# 7732-18-5 is not listed on the Canadian Ingredient Disclosure List.

CAS# 10043-35-3 is listed on the Canadian Ingredient Disclosure List.

Section 16 - Other Information

MSDS Creation Date: February 14, 1998

Revision Date: September 15, 2009

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