

Material Safety Data Sheet

Section 1: Chemical Product and Company Identification

Catalog Number: 1040, B-349, B014000, R1048000, R7149900, SB014000	
Product Identity: BORATE BUFFER	
Manufacturer's Name: RICCA CHEMICAL COMPANY LLC	Emergency Contact(24 hr) -- CHEMTREC® Domestic: 800-424-9300 International: 703-527-3887
CAGE Code: 0V553	
Address: 448 West Fork Dr Arlington, TX 76012	Telephone Number For Information: 817-461-5601
Date Prepared: 2/11/99	Revision: 5 Last Revised: 08/02/2006 Date Printed: 11/01/2006 10:51:51 am

Section 2. Composition/Information on Ingredients

Component	CAS Registry #	Concentration	ACGIH TLV	OSHA PEL
Sodium Borate Decahydrate	1303-96-4	< 1	Not Available 5 mg/m3	Not Available Not Available
Sodium Hydroxide	1310-73-2	< 1	Not Available C 2 mg/m3	Not Available 2 mg/m3
Water, Deionized	7732-18-5	Balance	Not Available Not Available	Not Available Not Available

Section 3: Hazard Identification

Emergency Overview: Non-flammable, non-toxic, non-corrosive. Does not present any significant health hazards. May cause irritation. Wash areas of contact with water.

Target Organs: eyes, skin

Eye Contact: May cause slight irritation.

Inhalation: Not likely to be hazardous by inhalation.

Skin Contact: May cause slight irritation.

Ingestion: May cause stomach upset and nausea. Estimated lethal dose is approximately 15-20 grams of the Sodium Borate.

Chronic Effects/Carcinogenicity: None

IARC - No.

NTP - No.

MSDS

OSHA - No.

Reproductive Information: Reproductive effects cited in 'Registry of Toxic Effects of Chemical Substances' for Sodium Borate Decahydrate.

Teratology (Birth Defect) Information: Mutation data cited in 'Registry of Toxic Effects of Chemical Substances' for Sodium Borate Decahydrate. Mutation data cited in 'Registry of Toxic Effects of Chemical Substances' for Sodium Hydroxide.

Section 4: First Aid Measures - In all cases, seek qualified evaluation.

Eye Contact: Irrigate immediately with large quantity of water for at least 15 minutes. Call a physician if irritation develops.

Inhalation: Remove to fresh air. Give artificial respiration if necessary. If breathing is difficult, give oxygen.

Skin Contact: Wash areas of contact with soap and water for at least 15 minutes. Call a physician if irritation develops.

Ingestion: Dilute with water or milk. Call a physician if necessary.

Section 5: Fire Fighting Measures

Flash Point: Not Available.

Method Used: Not Available.

LFL: Not Available.

UFL: Not Available.

Extinguishing Media: Use any means suitable for extinguishing surrounding fire.

Fire & Explosion Hazards: Not considered to be a fire or explosion hazard.

Fire Fighting Instructions: Use normal procedures/instructions.

Fire Fighting Equipment: Use protective clothing and breathing equipment appropriate for the surrounding fire.

Section 6: Accidental Release Measures

Absorb with suitable material and dispose of in accordance with local regulations.

Section 7: Handling and Storage

As with all chemicals, wash hands thoroughly after handling. Avoid contact with eyes and skin. Protect from freezing and physical damage.

Safety Storage Code: General

Section 8: Exposure Control/Personal Protection

Engineering Controls: No specific controls are needed. Normal room ventilation is adequate.

Respiratory Protection: Normal room ventilation is adequate.

Skin Protection: Chemical resistant gloves.

Eye Protection: Safety glasses or goggles.

Section 9: Physical and Chemical Properties

Appearance: Clear, colorless liquid

Odor: Odorless

Solubility in Water: Infinite

Specific Gravity: Approximately 1

pH: 9 - 11

Boiling Point(°C): Approximately 100

Melting Point(°C): Approximately 0

Vapor Pressure: Not Applicable.

Section 10: Stability and Reactivity

Chemical Stability: Stable under normal conditions of use and storage.

Incompatibility: Acids, alkaloids and metallic salts.

Hazardous Decomposition Products: Sodium oxides may form when heated to decomposition.

Hazardous Polymerization: Will not occur.

MSDS

Section 11. Toxicological Information

LD50, Oral, Rat: (Sodium Borate Decahydrate) 2660 mg/kg; details of toxic effects not reported other than lethal dose value.

Section 12. Ecological Information

Ecotoxicological Information: No information found

Chemical Fate Information: No information found

Section 13. Disposal Considerations

Dilute with water, then flush to sewer if local regulations allow. If not allowed, save for recovery or recycling in an approved waste disposal facility. Always dispose of in accordance with local, state and federal regulations.

Section 14. Transport Information

Part Numbers:

This product is not regulated.

Section 15. Regulatory Information (Not meant to be all inclusive - selected regulation represented)

OSHA Status: The above items either do not contain any specifically hazardous material or the potentially hazardous material is present in such low concentration that the items do not present any immediate threat to health and safety. These items do not meet the OSHA Hazard Communication Standard (29 CFR 1910.1200) definition of a hazardous material.

TSCA Status: All components of this solution are listed on the TSCA Inventory or are mixtures (hydrates) of items listed on the TSCA Inventory.

Sara Title III:

Section 302 Extremely Hazardous Substances: Not Applicable.

Section 311/312 Hazardous Categories: No

Section 313 Toxic Chemicals: Not Applicable.

California: None Reported.

Pennsylvania: Sodium Borate Decahydrate is listed as a Basic Hazard on the state's Hazardous Substances List. Sodium Hydroxide is listed as an Environmental Hazard on the state's Hazardous Substances List.

RCRA Status: Not Applicable.

CERCLA Reportable Quantity: Sodium Hydroxide - 1,000 pounds.

WHMIS: Not Applicable.

Section 16. Other Information



For RICCA, SpectroPure, Red Bird, and Solutions Plus Brands
Emergency Contact (24 hr) -- CHEMTREC®
Domestic: 800-424-9300
International: 703-527-3887

BORATE BUFFER

MSDS

NFPA Ratings:

Health: 1 Flammability: 0 Reactivity: 0 Special Notice Key:None

HMIS Ratings:

Health: 1 Flammability: 0 Reactivity: 0 Protective Equipment:B (Protective Eyewear, Gloves)

Rev 1, 9-18-2000: Reformatted from WordPerfect® to Microsoft Word®; (Section 2) revised concentrations to range, revised emergency telephone number to CHEMTREC® 800-424-9300; (Section 3) Added "May cause...water." in emergency overview; (Section 7) added storage code; (Section 9) added pH information; (Section 15) added TSCA statement regarding mixtures, added Florida and Pennsylvania listings.

Rev 2, 10-09-2001: Reformatted to electronic data format.

Rev 3, 09-25-2003: (Section 1) added Solutions Plus catalog number B014000.

Rev 4, 05-31-2006: (Section 1) added catalog number R7149900.

Rev 5, 08-02-2006: (Section 1) added catalog number R1048000; (Section 9) revised specific gravity from 9.5.

When handled properly by qualified personnel, the product described herein does not present a significant health or safety hazard. Alteration of its characteristics by concentration, evaporation, addition of other substances, or other means may present hazards not specifically addressed herein and which must be evaluated by the user. The information furnished herein is believed to be accurate and represents the best data currently available to us. No warranty, expressed or implied, is made and RICCA CHEMICAL COMPANY assumes no legal responsibility or liability whatsoever resulting from its use.