

Material Safety Data Sheet

Product Trade Name: **CHEMSHIELD® 2000B**

ID: H783

*** Section 1 - Chemical Product and Company Identification ***

Product Trade Name: CHEMSHIELD® 2000B

Manufacturer Information

Heatbath Corporation

P.O. Box 51048
Indian Orchard, MA 01151-5048

Contact Phone: (413) 452-2000

8:00 AM-5:00PM

CHEMTREC Emergency Phone: (800) 424-9300
24 Hours

*** Section 2 - Composition / Information on Ingredients ***

CAS #	Component	Percent
007732-18-5	Water	50 - 60
007681-53-0	Sodium Hypophosphite	10 - 20
Mixture	Sodium salts of organic acids	15 - 20
000127-09-3	Sodium Acetate	5 - 10
000064-19-7	Acetic acid	< 5
001303-96-4	Borax	< 1

Additional Information:

This product is considered hazardous under 29 CFR 1910.1200 (Hazard Communication).

*** Section 3 - Hazards Identification ***

Emergency Overview:

CAUTION! - Contact with this material can cause irritation to the skin, eyes and mucous membranes.

Eye Contact:

This product is irritating to the eyes. Contact may cause redness, watering and itchiness of eye area.

Skin Contact:

This product is irritating to the skin. Contact with the skin or mucous membranes may cause irritation such as redness or dryness.

Ingestion:

This product may cause irritation to the throat, esophagus, and gastrointestinal tract if it is swallowed.

Inhalation:

Inhalation of mists of this product may cause irritation to the nasal passages and respiratory tract.

Medical Conditions Aggravated by Exposure:

Pre-existing eye, skin, gastrointestinal and respiratory disorders may be aggravated by exposure.

*** Section 4 - First Aid Measures ***

Eye Contact:

In case of contact with the eyes, rinse immediately with plenty of water for 15 minutes and get immediate medical attention.

Skin Contact:

For skin contact, wash immediately with mild soap and water. Remove any contaminated clothing and shoes. Launder clothing before reuse. If irritation develops or persists, get medical attention.

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Ingestion:

If the material is swallowed, get immediate medical attention. Give victim several glasses of water to drink. Do not induce vomiting. Do not give anything by mouth to an unconscious person.

Inhalation:

If mist or vapor of this product is inhaled, remove person immediately to fresh air and get immediate medical attention. If victim's breathing is difficult, give oxygen. If victim is unconscious, give respiratory support.

First Aid: Notes to Physician

No information available.

*** Section 5 - Fire Fighting Measures ***

Flash Point: > 212 °F
Upper Flammable Limit (UFL): Not applicable

Method Used: Calculated
Lower Flammable Limit (LFL): Not applicable

Flammability Classification: Nonflammable

Fire & Explosion Hazards:

When heated at or above 392 °F (200 °C), material can form flammable and explosive vapors with air.

Decomposition Products:

When heated to decomposition, this product may emit toxic fumes of sodium oxide, phosphine gas, phosphorous oxides and various phosphoric acids.

Extinguishing Media:

Use dry chemical, foam, carbon dioxide, and/or water fog.

Fire-Fighting Instructions:

Firefighters: Wear full protective clothing including self-contained breathing apparatus. Properly decontaminate all equipment after use.

*** Section 6 - Accidental Release Measures ***

Containment and Clean up procedures must be conducted in accordance with all local, state, and federal regulations.

Containment Procedures:

Stop the flow of material, if this can be done without risk. Wear appropriate protective equipment and clothing during clean up.

Clean-Up Procedures:

Absorb spill with inert material. Shovel material into appropriate container for disposal. Dispose of collected material according to local, state, and federal regulations.

*** Section 7 - Handling and Storage ***

Handling Procedures:

Avoid contact with eyes, skin and clothing. Avoid breathing vapors or mists of this product. This product is for industrial use only. Use with adequate ventilation. Do not take internally.

Storage Procedures:

Keep container tightly closed and in a cool, well-ventilated place away from incompatible materials such as oxidizing materials and strong acids. Do not freeze. Avoid prolonged storage at elevated temperatures.

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*** Section 8 - Exposure Controls / Personal Protection ***

Exposure Guidelines:

A: General Product Information

Follow all applicable exposure limits.

B: Component Exposure Limits

Borax; sodium borate (001330-43-4)

ACGIH TLV: 1 mg/m³ TWA (as anhydrous sodium borate)

ACGIH TLV: 5 mg/m³ TWA (as sodium borate decahydrate)

OSHA PEL: 10 mg/m³ TWA (as sodium borate decahydrate)

NIOSH REL: 5 mg/m³ TWA (as sodium borate decahydrate)

Acetic Acid (000064-19-7)

ACGIH TLV: 15 ppm (37 mg/m³) STEL

ACGIH TLV: 10 ppm (25 mg/m³) TWA

OSHA PEL: 10 ppm (25 mg/m³) TWA

NIOSH REL: 10 ppm TWA

NIOSH REL: 15 ppm STEL

Engineering Controls:

Set up ventilation to effectively remove and prevent buildup of any vapor or mist generated from the handling of this product.

PERSONAL PROTECTIVE EQUIPMENT

Eyes/Face Protective Equipment:

Wear safety glasses or chemical goggles.

Skin Protection:

Use impervious gloves. Test gloves to determine suitability for prolonged contact. Use of impervious apron and boots are recommended.

Respiratory Protection:

If ventilation is not sufficient to effectively prevent buildup of mists or vapors, provide appropriate NIOSH/MSHA respiratory protection.

Personal Protective Equipment:

Eyewash fountains and emergency showers are required.

*** Section 9 - Physical & Chemical Properties ***

Physical State:	Liquid	Appearance:	Colorless to slightly yellow
Odor:	Slight	Vapor Pressure:	N/A
Vapor Density:	N/A	Boiling Point:	>212 °F (100 °C)
Specific Gravity:	1.19 - 1.23	pH:	5.4 - 5.8
Viscosity:	ND	VOC:	ND
Solubility in Water:	Complete as prepared	Evaporation Rate:	N/A
Percent Volatile:	ND	Percent Solids:	ND

*** Section 10 - Chemical Stability & Reactivity Information ***

Chemical Stability:

Stable under normal conditions.

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Conditions to Avoid:

Keep away from heat, ignition sources and incompatible materials (oxidizers and strong acids). If evaporated to dryness, explosion may occur due to evolution of phosphine gas.

Incompatibility:

Do not expose this product to excessive heat conditions, oxidizers or strong acids.

Decomposition Products:

Upon decomposition, this product may emit very toxic fumes of sodium oxide (Na₂O), phosphine gas, phosphorous oxides (PO_x) and various phosphoric acids.

Hazardous Polymerization:

Will not occur.

* * * Section 11 - Toxicological Information * * *

Acute Toxicity:

A: General Product Information

No information available for the product.

B: Component Analysis - LD50/LC50/LDLo

Sodium Hypophosphite (007681-53-0)

Intraperitoneal LD₅₀ Mouse: 1584 mg/kg

Sodium Acetate (000127-09-3)

Oral LD₅₀ Rat: 3530 mg/kg

Acetic Acid (000064-19-7)

Oral LD₅₀ Rat: 3310 mg/kg

Borax; sodium borate (001330-43-4)

Oral LD₅₀ Rat: 2660 mg/kg (as sodium borate decahydrate)

Oral LD_{LO} Man: 709 mg/kg (as sodium borate decahydrate)

Carcinogenicity:

A: General Product Information

No information available for the product.

B: Component Carcinogenicity

No information available for the product.

Chronic Toxicity:

No information available for the product.

Other Toxicological Information:

None available.

* * * Section 12 - Ecological Information * * *

Ecotoxicity:

A: General Product Information

No data available for this product. Because of the sodium acetate content of this product, it would be expected to produce significant ecotoxicity upon exposure to aquatic organisms, aquatic systems, terrestrial organisms and terrestrial systems.

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B: Component Analysis - Ecotoxicity - Aquatic Toxicity

Sodium Acetate (000127-09-3)

Test & Species:	Amount:	Conditions:
LC50 (24 hr) bluegill	5000 mg/L	---
EC50 (48 hr) water flea	5800 mg/L	---

Acetic Acid (000064-19-7)

Test & Species:	Amount:	Conditions:
LC50 (96 hr) fathead minnow	88 mg/L	Static, 18 – 22 °C
LC50 (96 hr) bluegill sunfish	75 mg/L	---

Environmental Fate:

No data available for this product.

*** Section 13 - Disposal Considerations ***

Wastes must be tested using methods described in 40 CFR Part 261. It is the generator's responsibly to determine if the waste meets applicable definitions of hazardous wastes. State and local regulations may differ from Federal disposal regulations. Dispose of waste material according to Local, State, Federal and Provincial Environmental Regulations.

*** Section 14 - Transportation Information ***

US DOT Information

Proper Shipping Name	NOT D.O.T. REGULATED
Hazard Class	
UN / NA Number	
Packing Group	
Product RQ (lb)	

*** Section 15 - Regulatory Information ***

US Federal Regulations

A: General Product Information

No additional information available.

B: Component Analysis

This material contains one or more of the following chemicals, requiring identification under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65) and/or CERCLA (40 CFR 302.4).

SARA 311/312: Acute: No Chronic: No Fire: No Pressure: No Reactive: No

State Regulations

A: General Product Information

No information available.

B: Component Analysis - State

The following components appear on one or more of the following state Right-To-Know lists:

Component	CAS #	CA	FL	MA	MN	NJ	PA	RI
Borax	001303-96-4	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Acetic acid	000064-19-7	No	Yes	Yes	Yes	Yes	Yes	Yes

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Other Regulations

A: General Product Information

All components are on the U.S. EPA TSCA Inventory List.

B: Component Analysis – Inventory

Component	CAS #	TSCA	DSL	EINECS
Borax	001303-96-4	Yes	Yes	Yes
Sodium Acetate	00127-09-3	Yes	Yes	Yes
Sodium Hypophosphite	007681-53-0	Yes	Yes	Yes
Acetic acid	000064-19-7	Yes	Yes	Yes

C: Component Analysis - WHMIS IDL

The following components are identified under the Canadian Hazardous Products Act Ingredient Disclosure List:

Component	CAS #	Minimum Concentration
Borax	001303-96-4	1% item 1458 (1566)
Acetic acid	000064-19-7	1% item 6 (51)

* * * Section 16 – Other Information * * *

NFPA Ratings: Health: 1 Fire: 1 Reactivity: 3 Other:
Hazard Scale: 0 = Minimal, 1 = Slight, 2 = Moderate, 3 = Serious, 4 = Severe

HMIS Ratings: Health: 1 Fire: 1 Reactivity: 3 Personal Protection:
Hazard Scale: 0 = Minimal, 1 = Slight, 2 = Moderate, 3 = Serious, 4 = Severe, * = Chronic hazard

MSDS Change History:

5/07/03: Rev.02 / Control # MSDS0103; MSDS as issued by Chemtech Finishing Systems.
1/18/05: Chemtech Finishing Systems acquired by Heatbath Corporation.
4/25/06: Rev.03; Chemtech MSDS issued under new manufacturer: Heatbath Corporation.
Sec.1 - Manufacturer Information Updated
Sec.16 - MSDS Change History section added

Key/Legend:

ACGIH = American Conference of Governmental Industrial Hygienists	NFPA = National Fire Protection Association
CERCLA = Comprehensive Environmental Response, Compensation and Liability Act	NIOSH = National Institute for Occupational Safety and Health
EPA = Environmental Protection Agency	NTP = National Toxicology Program
HMIS = Hazardous Material Identification System	OSHA = Occupational Safety and Health Administration
IARC = International Agency for Research on Cancer	SARA = Superfund Amendments and Reauthorization Act
MSHA = Mine Safety and Health Administration	TSCA = Toxic Substance Control Act

The information presented herein is believed to be factual as it has been derived from the works and opinions of persons believed to be qualified experts; however, nothing contained in this information is to be taken as a warranty or representation for which Heatbath Corporation bears legal responsibility. The user should review any recommendations in the specific context of the intended use to determine whether they are appropriate.

This is the end of MSDS for CHEMSHIELD® 2000B.