



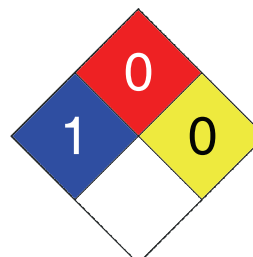
MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

Product Name Foundation
CAS # Mixture
Product use Start-up mixture for swimming pool water.
Manufacturer Natural Chemistry, Inc.
40 Richards Ave.
Norwalk, CT 06854 US
Phone: (800) 753-1233
Emergency Phone: CHEMTREC (800) 424-9300

LEGEND HMIS/NFPA	
Severe	4
Serious	3
Moderate	2
Slight	1
Minimal	0

Health	* 1
Flammability	0
Physical Hazard	0
Personal Protection	C



2. Hazards Identification

Emergency overview WARNING
EYE AND SKIN IRRITANT.
Contains potential reproductive toxins. May cause chronic toxic effects.

Potential short term health effects

Routes of exposure Eye, Skin contact, Inhalation, Ingestion.

Eyes May cause irritation.

Skin Prolonged or repeated skin contact may result in redness, burning sensation or dermatitis.

Inhalation Dusts of this product may cause irritation of the nose, throat, and respiratory tract.

Ingestion Harmful if swallowed. May cause stomach distress, nausea or vomiting.

Target organs Eyes. Respiratory system. Skin. Kidney. Liver.

Chronic effects Prolonged or repeated exposure can cause drying, defatting and dermatitis. Prolonged or repeated overexposure can cause liver and kidney damage.

Signs and symptoms Symptoms may include redness, edema, drying, defatting and cracking of the skin. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.

3. Composition / Information on Ingredients

Ingredient(s)	CAS #	Percent
Disodium salt of ethylenediaminetetraacetic acid	6381-92-6	5 - 10
Sodium tetraborate pentahydrate	12179-04-3	40 - 70
Boric acid	10043-35-3	30 - 60
Lanthanum sulfate	10099-60-2	1 - 5

4. First Aid Measures

First aid procedures

Eye contact Immediately flush with cool water. Remove contact lenses, if applicable, and continue flushing for 20 minutes. Obtain medical attention immediately.

Skin contact Brush away excess of dry material. Flush with water. Obtain medical attention if irritation persists.

Inhalation If symptoms develop move victim to fresh air. If symptoms persist, obtain medical attention.

Ingestion	Do not induce vomiting. Never give anything by mouth if victim is unconscious, or is convulsing. Obtain medical attention.
Notes to physician	Symptoms may be delayed.
General advice	Avoid contact with eyes and skin. If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Keep out of reach of children.

5. Fire Fighting Measures

Flammable properties	Not flammable by WHMIS/OSHA criteria.
Extinguishing media	
Suitable extinguishing media	Dry chemical. Water spray. Foam. Carbon dioxide.
Unsuitable extinguishing media	Not available
Protection of firefighters	
Specific hazards arising from the chemical	Not available
Protective equipment for firefighters	Firefighters should wear full protective clothing including self contained breathing apparatus.
Hazardous combustion products	May include and are not limited to: Oxides of carbon. Oxides of nitrogen. Oxides of boron.
Explosion data	
Sensitivity to mechanical impact	Not available
Sensitivity to static discharge	Not expected to be sensitive to static discharge.

6. Accidental Release Measures

Personal precautions	Keep unnecessary personnel away. Do not touch or walk through spilled material. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep people away from and upwind of spill/leak.
Methods for containment	Prevent entry into waterways, sewers, basements or confined areas.
Methods for cleaning up	Before attempting clean up, refer to hazard data given above. Use broom or dry vacuum to collect material for proper disposal without raising dust. Rinse area with water. Prevent large spills from entering sewers or waterways. Contact emergency services and supplier for advice.

7. Handling and Storage

Handling	Use good industrial hygiene practices in handling this material.
Storage	Keep out of reach of children. Store in a closed container away from incompatible materials.

8. Exposure Controls / Personal Protection

Exposure limits

Ingredient(s)	Exposure Limits
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Boric acid	ACGIH-TLV TWA: 2 mg/m ³ STEL: 6 mg/m ³ OSHA-PEL Not established
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Disodium salt of ethylenediaminetetraacetic acid	ACGIH-TLV Not established OSHA-PEL Not established
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Lanthanum sulfate	ACGIH-TLV Not established OSHA-PEL Not established
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Sodium tetraborate pentahydrate	ACGIH-TLV TWA: 2 mg/m ³ STEL: 6 mg/m ³ OSHA-PEL Not established
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Engineering controls	General ventilation normally adequate. Local exhaust is suggested for use, where possible, in enclosed or confined spaces.
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Personal protective equipment

Eye / face protection	Chemical splash goggles.
Hand protection	Rubber gloves. Confirm with a reputable supplier first.
Skin and body protection	As required by employer code. Rubber apron recommended.
Respiratory protection	Where exposure guideline levels may be exceeded, use an approved NIOSH respirator.
General hygiene considerations	Handle in accordance with good industrial hygiene and safety practice. When using do not eat or drink. Wash hands before breaks and immediately after handling the product.

9. Physical and Chemical Properties

Appearance	Solid.
Color	White
Form	Powder
Odor	Odorless
Odor threshold	Not available
Physical state	Solid
pH	8.6 - 8.9
Melting point	Not available
Freezing point	Not available
Boiling point	Not available
Flash point	Not available
Pour point	Not available
Evaporation rate	Not available
Flammability limits in air, lower, % by volume	Not available
Flammability limits in air, upper, % by volume	Not available
Vapor pressure	Not available

Vapor density	Not available
Specific gravity	Not available
Octanol/water coefficient	Not available
Solubility (H2O)	Not available
Auto-ignition temperature	Not available
VOC (Weight %)	Not available
Viscosity	Not applicable
Percent volatile	Not available
Molecular formula	Mixture

10. Stability and Reactivity

Chemical stability	Stable under recommended storage conditions.
Conditions to avoid	Do not mix with other chemicals.
Incompatible materials	Acids. Oxidizers. Reducing agents.
Hazardous decomposition products	May include and are not limited to: Oxides of carbon. Oxides of nitrogen. Oxides of boron.
Possibility of hazardous reactions	Hazardous polymerization does not occur.

11. Toxicological Information

Component analysis - LC50

Ingredient(s)	LC50
Boric acid	3450 mg/kg mouse
Disodium salt of ethylenediaminetetraacetic acid	Not available
Lanthanum sulfate	Not available
Sodium tetraborate pentahydrate	Not available

Component analysis - Oral LD50

Ingredient(s)	LD50
Boric acid	2660 mg/kg rat
Disodium salt of ethylenediaminetetraacetic acid	2000 mg/kg rat
Lanthanum sulfate	4991.0001 mg/kg rat
Sodium tetraborate pentahydrate	3400 mg/kg rat

Effects of acute exposure

Eye	May cause irritation.
Skin	Prolonged or repeated skin contact may result in redness, burning sensation or dermatitis.
Inhalation	Dusts of this product may cause irritation of the nose, throat, and respiratory tract.
Ingestion	Harmful if swallowed. May cause stomach distress, nausea or vomiting.
Sensitization	Non-hazardous by WHMIS/OSHA criteria.
Chronic effects	Prolonged or repeated overexposure can cause liver and kidney damage.
Carcinogenicity	Non-hazardous by WHMIS/OSHA criteria.

ACGIH - Threshold Limit Values - Carcinogens

Boric acid	10043-35-3	A4 - Not Classifiable as a Human Carcinogen
Sodium tetraborate pentahydrate	12179-04-3	A4 - Not Classifiable as a Human Carcinogen

Mutagenicity Non-hazardous by WHMIS/OSHA criteria.

Reproductive effects Borates may cause harmful reproductive effects based on animal data. Boric acid may cause developmental changes based on published data, at doses many times in excess of those that could occur through inhalation of dust in occupational settings.

Teratogenicity Non-hazardous by WHMIS/OSHA criteria.

Synergistic Materials Not available

12. Ecological Information

Ecotoxicity	Components of this product have been identified as having potential environmental concerns.	
Ecotoxicity - Freshwater Fish Species Data		
Boric acid	10043-35-3	72 Hr LC50 Carassius auratus: 1020 mg/L [flow-through]
Ecotoxicity - Water Flea Data		
Boric acid	10043-35-3	48 Hr EC50 Daphnia magna: 115 - 153 mg/L
Environmental effects	Not available	
Aquatic toxicity	Not available	
Persistence / degradability	Not available	
Bioaccumulation / accumulation	Not available	
Partition coefficient	Not available	
Mobility in environmental media	Not available	
Chemical fate information	Not available	
Other adverse effects	Not available	

13. Disposal Considerations

Waste codes	Not available
Disposal instructions	Review federal, state/provincial, and local government requirements prior to disposal.
Waste from residues / unused products	Not available
Contaminated packaging	Not available

14. Transport Information

U.S. Department of Transportation (DOT)	Not regulated as dangerous goods.
Transportation of Dangerous Goods (TDG - Canada)	Not regulated as dangerous goods.

15. Regulatory Information

Canadian federal regulations	This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.	
Canada - WHMIS - Ingredient Disclosure List		
Boric acid	10043-35-3	1 %
US Federal regulations	This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200. All components are on the U.S. EPA TSCA Inventory List.	
Occupational Safety and Health Administration (OSHA)		
29 CFR 1910.1200 hazardous chemical	Yes	
CERCLA (Superfund) reportable quantity		
None		
Superfund Amendments and Reauthorization Act of 1986 (SARA)		
Hazard categories	Immediate Hazard - Yes Delayed Hazard - Yes Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No	
Section 302 extremely hazardous substance	No	
Section 311 hazardous chemical	Yes	
Clean Air Act (CAA)	Not available	
Clean Water Act (CWA)	Not available	

WHMIS status Controlled
WHMIS classification Class D - Division 2A, 2B
WHMIS labeling



State regulations This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

U.S. - California - 8 CCR Section 339 - Director's List of Hazardous Substances

Sodium tetraborate pentahydrate 12179-04-3 Present (exempt except when present as free crystal/powder)

U.S. - Massachusetts - Right To Know List

Sodium tetraborate pentahydrate 12179-04-3 Present

Inventory name

Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

16. Other Information

Disclaimer

Information contained herein was obtained from sources considered technically accurate and reliable. While every effort has been made to ensure full disclosure of product hazards, in some cases data is not available and is so stated. Since conditions of actual product use are beyond control of the supplier, it is assumed that users of this material have been fully trained according to the requirements of all applicable legislation and regulatory instruments. No warranty, expressed or implied, is made and supplier will not be liable for any losses, injuries or consequential damages which may result from the use of or reliance on any information contained in this document.

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Prepared by

Dell Tech Laboratories Ltd. (519) 858-5021

Other information

For an updated MSDS, please contact the supplier/manufacturer listed on the first page of the document.