Section 1 Identification

Product:	LiteHouse Lemon Verbena Borate
Other Means of Identification:	White granular solid with Lemon Verbena Fragrance
Recommended Use and Restrictions on Use:	Swimming pool and Hot Tub maintenance. Not for use in drinking water treatment or other water treatment applications.
Source	Oxygen Water Products PO Box 3328 Boynton Beach, FL 33424 800-633-8253
Emergency Phone	(800) 633-8253, Professional Emergency Resource Services (PERS) Account #1823
Office Phone	(877)-246-9943
Website	Oxygenwaterproducts.com

Section 2 Hazard(s) Identification

Emergency Overview:	White granular solid with no odor. Potential eye irritant. May react with metals or strong reducing agents
Classification, 29 CFR 1910.1200	Product is hazardous by OSHA criteria.
Eye irritation	category 2A
Toxic to Reproduction	category 2 (boric acid, oral exposure, lab animal data)
Signal Word:	Warning
Hazard Statement(s):	Causes serious eye irritation Suspected of damaging fertility or the unborn child (based on high dose laboratory animal studies with boron compounds indicating damage to testes and fetal abnormalities)
Pictogram(s):	
Exclamation Mark	
Health Hazard	
Precautionary Statements:	Do not get product in eyes. Wear safety glasses with side shields.

Wear protective gloves
Wash gloves and contaminated surfaces thoroughly after handling.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.
If on skin: Brush off. No health effects expected.
If inhaled: If breathing is difficult, remove person to fresh air and keep comfortable for breathing. If experiencing respiratory irritation: Call a doctor.
If swallowed: Rinse mouth. Do NOT induce vomiting.

Dispose of contents or container in accordance with local state and federal regulations.

Hazards Not Otherwise Classified:	Mild irritation to the nose and throat may occur following inhalation of product or product dust.
Ingredients with Unknown Toxicity:	None
Potential Environmental Effects:	Significant contamination of small bodies of surface water or localized areas at the point of a spill may depress pH levels below tolerable levels for aquatic organisms. The borax pentahydrate and boric acid ingredients may damage plant life if concentrated product is dumped in the environment.

Section 3 Composition/Information on Ingredients

Hazardous Ingredient(s)	Common name	CAS#	% by Wt.
Boric acid	none	10043-35-3	50-80
Proprietary *	Proprietary	N/A	1.0-15.0
Proprietary *	Proprietary	N/A	1.0-15.0

The exact percent by weight of the ingredients in this formulation is proprietary.

Section 4 First-Aid Measures

Eyes:	If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.
Skin:	If on skin: Brush off. No health effects expected.
Inhalation:	If inhaled: If breathing is difficult, remove person to fresh air and keep comfortable for breathing. If experiencing respiratory irritation: Call a doctor.
Ingestion:	If swallowed: Rinse mouth. Do NOT induce vomiting.
Acute Symptoms:	Irritation to eyes. Symptoms following overexposure by ingestion may include nausea, diarrhea, and vomiting.
Delayed Effects:	None known.

Immediate or Special Treatment Requirements:

Product contains boron compounds. Observation only is required for adult ingestion of less than one teaspoon of product. For ingestion of larger amounts, maintain kidney function and force fluids. Get medical attention.

Section 5 Fire Fighting Measures

Suitable Extinguishing Media:	Use media appropriate for surrounding fire. Product ingredients will act as a flame retardants. Avoid use of a direct stream of water on spilled granular material as this may scatter spilled material.
Specific Hazards:	Product is a potential eye irritant. Avoid breathing dust.
Special PPE & Precautions:	Wear self-contained breathing apparatus and full turn-out gear. If possible, move containers away from fire. If product is engulfed in flame or exposed to extreme heat under fire conditions, product may evolve hazardous gases.

Section 6 Accidental Release Measures

Personal Precautions, PPE, & Emergency Procedures:	Wear safety glasses with side shields and protective industrial rubber gloves. Avoid dust formation. Avoid breathing dust. If spill escapes to sanitary sewer, notify local public works authorities. If spill escapes to the environment, notify state and federal EPA and, if appropriate, the Coast Guard.
Containment & Clean-Up:	Contain and collect spills with shovels and brooms. Unused product or spill cleanup residues not contaminated with other chemicals are not expected to be RCRA hazardous waste. Consult local authorities for appropriate waste disposal options in your location.

Section 7 Handling and Storage

Precautions for Safe Handling:	Avoid spillage. Clean up small spills promptly. Protect product from contamination. Avoid contact between this product and other chemicals, especially strong reducing agents.
Conditions for Safe Storage:	Store product in closed container in well ventilated, secure area. Protect from moisture. Avoid storage at elevated temperatures. Protect containers against physical damage. Protect label. Empty containers retain product residues and all label hazards are still present,

Section 8 Exposure Controls/Personal Protection

Exposure limits for the formulated product are not established. Exposure limits for hazardous ingredient(s) are:

Ingredient	Source & Parameter	Exposure Limit
Borax pentahydrate and boric acid, listed as borate compounds, inorganic	ACGIH TWA TLV ACGIH STEL	2 mg/m3 6 mg/m3

Exposure limits for hazardous ingredient(s) continued --

Ingredient	Source & Parameter	Exposure Limit
The generic OSHA PEL's for particulates not otherwise regulated. (dust)	OSHA PEL (total)	15 mg/m3
	OSHA PEL (respirable)	5 mg/m3

NOTE: OSHA - Occupational Safety and Health Administration; ACGIH - American Conference of Governmental Industrial Hygienists; NIOSH – National Institute for Occupational Safety and Health; PEL – Permissible Exposure Limit; TWA – Time Weighted Average; TLV – Threshold Limit Value; REL – Recommended Exposure Limit; STEL – Short Term Exposure Limit; IDLH - Immediately Dangerous to Life or Health.

Engineering Controls:	General exhaust ventilation is adequate. Employ work practices and product transfer practices that avoid spills and dust formation.
Individual Protection/PPE:	Wear safety glasses with side shields and protective industrial rubber gloves.

Section 9 Physical and Chemical Properties

Appearance (physical state, color, etc.):	White granular solid
Odor:	None
Odor threshold:	None
pH:	None, granular solid
Expected product solution pH	Acidic
Melting point/freezing point:	Not known
Initial boiling point and boiling range:	Not known
Flash point:	None
Evaporation rate:	Granular solid; does not evaporate
Flammability (solid, gas):	Granular solid; not combustible
Lower/Upper flammability or explosive limits:	Granular solid; not combustible
Vapor pressure:	Not known; negligible
Vapor density:	Not known; negligible
Relative density:	~1.60-1.851 g/cc
Solubility(ies):	Unknown %, water soluble mixture
Partition coefficient: n-octanol/water:	Not known
Auto-ignition temperature:	Not known
Decomposition temperature:	Not known
Viscosity:	Not known, not liquid

Section 10 Stability and Reactivity

Reactivity:	Product may react with metals or strong reducing agents.
Chemical stability:	Stable at ambient temperatures and pressures.
Possibility of Hazardous Reactions:	May react with metals or strong reducing agents. . Polymerization will not occur.
Conditions to Avoid:	Contact with metals or strong reducing agents.
Incompatible Materials:	Metals or strong reducing agents.
Hazardous Decomposition Products:	Boranes, hydrogen (flammable), boron oxides

Section 11 Toxicological Information

Likely Routes of Exposure:	Eye contact.
Symptoms Related to Physical, Chemical, and Toxicological Characteristics:	Product may be irritating to eyes and mucous membranes. Contact will irritate eyes. Inhalation of dust may irritate respiratory system.
Delayed Effects:	None known.
Immediate Effects:	Irritation to eyes or respiratory system.
Chronic Effects:	Boron compounds are suspected of damaging fertility or the unborn child (based on high dose laboratory animal studies with boron compounds indicating damage to testes and fetal abnormalities)
Numerical Measures of Toxicity:	No toxicology available on the formulated product. Toxicology data for product ingredients:
borax pentahydrate	Oral rat LD50 3,200-3,500 mg/kg
Boric acid	Oral rat LD50 3,500-4,100 mg/kg Inhalation rat LC50 >2.0 mg/l (>2.0 g/m3)
Citric acid	Oral rat LD50 11,700 mg/kg
Carcinogenicity:	None of the product ingredients are listed as carcinogens by IARC, NTP, or OSHA.

Section 12 Ecological Information

Ecotoxicity:	No ecotoxicity data available for the formulated product. Significant contamination of small bodies of surface water or localized areas at the point of a spill may depress pH levels below tolerable levels for aquatic organisms. The borax pentahydrate and boric acid ingredients may damage plant life if concentrated product is dumped in the environment. Ingredient LC50's:
Borax pentahydrate & Boric acid	Fathead minnow 96 hour LC50 – 79.7 mg B/l (data as elemental boron)
	Daphnia magna straus 48 hour EC50 – 133 mg B/ (as elemental boron)l
Citric acid	Bluegill sunfish 96 hour LC50 – 1,516 mg/l
	Daphnia magna, 24 hour LC50 – 1,535 mg/l
Persistence and Degradability:	Ingredients not persistent. Borates and borate breakdown products are naturally occurring compounds in the environment.
Bioaccumulative Potential:	Does not bioaccumulate.
Mobility in Soil:	Water solubility may enhance mobility in groundwater.
Other Adverse Effects:	None known.

Section 13 Disposal Considerations

Product is consumed during recommended use. Flush residues to the treated system. If product is not consumed in use, material is not RCRA hazardous waste. Dispose of contents or container in accordance with local, state, and federal regulations.

Section 14 Transport Information

UN Number:	None; not regulated
UN Proper Shipping Name:	None
Transport Hazard Class(es)	None
Packing Group:	None
Environmental Hazards:	Does not contain ingredient(s) listed as marine pollutant.
Transport in Bulk:	Product container meets or exceeds DOT requirements.
Special Precautions:	None

Section 15 Regulatory Information

US EPA SARA Title III, EPCRA	
Section 302/303/313	Ingredients not listed
Section 304	Ingredients not listed
Section 311/312	Acute hazard (eye irritant)
US EPA CERCLA	Ingredients not listed
US EPA TSCA:	All ingredients listed or exempt

Section 16 Other Information

NFPA Hazard Ranking

Health	Fire	Reactivity	Special
1	0	0	none

HMIS Hazard Ranking

Health	Fire	Reactivity	PPE
1	0	0	B (defined below)

B – safety glasses with side shields and gloves

References

1. Manufacturers' SDS on file for raw materials used in this product.
2. 29 CFR 1910.1200. Current OSHA e-CFR edition as of November 2022.
3. ANSI Z400.1/Z129.1-2010. Hazard Evaluation and Safety Data Sheet and Labeling Preparation. American Nationals Standards Institute, Inc., New York, NY. 2010.
4. The Globally Harmonized system of Classification and Labeling of Chemicals. (Purple Book) United Nations. 2009.
5. The Globally Harmonized system of Classification and Labeling of Chemicals. (Purple Book) Fifth Revised Edition. United Nations. 2013.
6. ACGIH. Threshold Limit Values and Biological Exposures Indices. 2021.
7. 49 CFR 172.101, Hazardous Materials Table. Current DOT eCFR edition as of November 2022.
8. EPA List of Lists. EPA 550-B-19-003. June 2019. Online at www.epa.gov/epcra.

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