

Bi MAX TM

MATERIAL SAFETY DATA SHEET

PRODUCT: BIOMAX OX

SECTION I: IDENTIFICATION

Manufacturers Name: Ecological Laboratories, Inc.
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Cape Coral, FL 33909
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SECTION II: COMPOSITIONS/ INGREDIENTS

<u>PRODUCT</u>	<u>CAS NO</u>	<u>Wt. %</u>
Calcium Peroxide	1305-79-9	75
Calcium Hydroxide	1305-62-0	25

SECTION III: PHYSICAL/CHEMICAL CHARACTERISTICS

ODOR: None
APPEARANCE: White to yellow powder
pH: (1% solution) @ 25° C.: Slurry 12-13
PERCENT VOLATILE: Not applicable
VAPOR PRESSURE: Not applicable
VAPOR DENSITY: Air=1: Not available
BOILING POINT: Not applicable
MELTING POINT: Decomposes on heating (About 275° C.)
SOLUBILITY IN WATER: Insoluble
EVAPORATION RATE:
(Butyl Acetate = 1): Not applicable
DENSITY: Not available
SPECIFIC GRAVITY: (H²O=1): Approx. 2.92 bulk density 27 lbs./cu. Ft.
COEFF. OIL/WATER: Not available
ODOR THRESHOLD: Not applicable
OXIDIZING PROPERTIES: Oxidizer

SECTION IV: FIRE AND EXPLOSION HAZARD DATA

FLAMMABLE LIMITS: Non-combustible
EXTINGUISHING MEDIA: Water

EXPLOSION HAZARDS:	Under fire, conditions may decompose and release oxygen gas. Mixtures with polysulfide polymers may ignite.
FIRE FIGHTING PROCEDURES:	Use flooding quantities of water. Use water spray to keep fire exposed, containers cool.
AUTOIGNITION TEMPERATURE:	Non-combustible
PROPERTIES CONTRIBUTING TO FLAMMABILITY:	Not applicable
SENSITIVITY TO IMPACT:	Oxidizable materials can be ignited by grinding and may become explosive.
HAZARDOUS DECOMPOSITION PRODUCTS:	Oxygen that supports combustion and calcium hydroxide.

SECTION V: REACTIVITY DATA

CONDITIONS TO AVOID:	Heat (decomposes at 275° C.), moisture, reducing agents. Grinding with organics.
STABILITY:	Stable (decomposition could occur when exposed to heat or moisture)
POLYMERIZATION:	Will not occur
HAZARDOUS DECOMPOSITION PRODUCTS:	Oxygen which supports combustion.
INCOMPATIBLE MATERIALS:	Grinding mixtures with organics (oxidizable materials can be ignited by grinding and may become explosive): heavy metals.

SECTION VI: HEALTH HAZARD DATA

EMERGENCY OVERVIEW:	
IMMEDIATE CONCERNS:	Oxidizer. Contact with combustibles may cause fire. Under fire conditions product may decompose releasing oxygen that intensifies fire. Deluge container with water at safe distance or in protected area.
POTENTIAL HEALTH EFFECTS:	Airborne dust may be irritation to eyes, nose throat and lungs. No significant long term inhalation hazard; irritation usually subsides after exposure ceases.

SECTION VII: PRECAUTIONS FOR SAFE HANDLING, USE AND DISPOSAL

HANDLING:	Avoid contact by using personal protective equipment. Use respiratory protective equipment when release of airborne dust is expected. If compounded with organics or combustible materials be sure to exclude moisture.
STORAGE:	Keep material dry. Store in a clean and cool place. Do not store near or expose to heat sources i.e., steam pipes, radiant heaters, hot air vents or welding sparks. Avoid contact with reducing agents. Reacts with moisture. Keep container tightly closed when not in use
VENTILATION:	Provide mechanical general and/or local exhaust ventilation to prevent release of dust into work environment. If ventilation is inadequate or not available, use dust respirator and eye protection.
DISPOSAL METHOD:	Dissolve in water to allow the release of oxygen and dispose via a treatment system in accordance with governmental agencies regulations. Contact appropriate regulatory agency prior to disposal.

SECTION VIII: CONTROL MEASURES

EXPOSURE LIMITS

Chemical Name	TWA (ACGIH)	STEL/Ceiling (ACGIH)	PEL (OSHA)	STEL/Ceiling (OSHA)
Calcium Hydroxide	5 mg/m ³		5 mg/m ³	

ENGINEERING CONTROLS: Provide mechanical local exhaust ventilation to prevent the release of vapors or mist into the work area. If release is expected use respiratory protection.

PERSONAL PROTECTIVE EQUIPMENT:

EYES AND FACE: Chemical goggles or face shield.

RESPIRATORY: Use approved dust respirator with full face piece.

PROTECTIVE CLOTHING: Rubber or neoprene gloves. Long sleeve shirt, impervious apron or clothing. Rubber or neoprene footwear.

SECTION IX: TOXICOLOGY INFORMATION

EYE EFFECTS: Severe irritation to unwashed eyes. Minimal irritation to washed eyes. (rabbit) [Ref. FMC 188-1053]

SKIN EFFECTS: Non-irritation (rabbit) [Ref. FMC 188-1054]

DERMAL LD₅₀: >10 g/kg (rat) [Ref. FMC 188-1052]

ORAL LD₅₀: >5 g/kg (rat) [Ref. FMC 188-1052]

INHALATION LC₅₀: >17 mg/L (1 hr.) (rat) [Ref. FMC ICG/T-79.026]

TARGET ORGANS: Eyes and respiratory passages

ACUTE EFFECTS FROM

OVEREXPOSURE: Dust is irritating to eyes, nose, throat, and lungs.

CHRONIC EFFECTS FROM

OVEREXPOSURE: No data available for the product.

CARCINOGENICTY: IARC: not listed; NTP: not listed; OSHA: not listed; OTHER: ACGIH: not listed

SECTION X: ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION: Effect of low concentrations on aquatic life is unknown. [Ref. NIOSH RTECS No., 79-100]

CHEMICAL FATE INFORMATION: As indicated by chemical properties, oxygen is released into the environment.

SECTION XI: TRANSPORT INFORMATION

PROPER SHIPPING NAME: Calcium Peroxide

PRIMARY HAZARD CLASS/DIVISION: 5.1 (Oxidizer)

UN/NA NUMBER: UN 1457

PACKING GROUP: II

PLACARDS: 5.1 Oxidizer

LABEL: Oxidizer

OTHER SHIPPING INFORMATION:

DOT MARKING: Calcium Peroxide 1457

HAZARDOUS SUBSTANCE/RQ: Not applicable

49 STCC NUMBER: 49187717

100 lb. fiber drums (DOT 21C115 w/polyliner)

SPECIAL SHIPPING NOTES:

IMDG: Calcium Peroxide

IATA: Calcium Peroxide

Place spilled product in suitable container and wash residue with plenty of water.

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