

# SAFETY DATA SHEET

## Bio-Zyme O

### SECTION 1: PRODUCT & COMPANY IDENTIFICATION

DATE: 03/18/2015 / Supersedes Revision: NA

**Manufacturer:**

PDQ Manufacturing, Inc.  
201 Victory Circle  
Ellijay, GA USA 30540  
Phone: (706) 636-1848  
Website: www.pdqonline.com

**Distributor:**

Memtec Services, In.c  
182 S. Peiffer Road  
Wellsville, PA 17365  
Phone: (717) 292-9353

**EMERGENCY CONTACT:** Chemtrec, Reference CCN203605

Phone: (800) 424-9300 (collect calls accepted) / International: (703) 527-3887

**Product Name:** Bio-Zyme O

**ID Code:** 4753

**Product Category:** Enzyme Detergent

### SECTION 2: HAZARD(S) IDENTIFICATION

**Acute Toxicity: Oral, Category 4**

**Acute Toxicity: Skin, Category 4**

**Acute Toxicity: Inhalation, Category 4**



**GHS Signal Word: Warning**

**GHS Hazard Phrases:**

H302 - Harmful if swallowed. IF SWALLOWED: Immediately call a POISON CENTER or physician. Rinse mouth. Do not induce vomiting.

H316 - Causes mild skin irritation.

H332 - Harmful if inhaled.

**GHS Precaution Phrases:**

P261 - Avoid breathing dust/fume/gas/mist/vapours/spray.

P264 - Wash hands thoroughly after handling.

P270 - Do not eat, drink or smoke when using this product.

P271 - Use only outdoors or in a well-ventilated area.

P280 - Wear protective gloves/protective clothing/eye protection/face protection.

**GHS Response Phrases:**

P301+312 - IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

P302+352 - IF ON SKIN: Wash with plenty of soap and water.

P304+340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P312 - Call a POISON CENTER or doctor/physician if you feel unwell.

P330 - Rinse mouth.

P332+313 - If skin irritation occurs, get medical advice/attention.

P363 - Wash contaminated clothing before reuse.

**GHS Storage and Disposal Phrases:**

P501 - Unused product is not a RCRA Hazardous waste. However, contaminated product and wastes may be RCRA hazardous. Users are advised to determine the appropriate disposal method based on local, state and federal regulations and comply with those regulations.

**Hazard Rating System:**

**HMIS**

**Health: 1**

**Flammability: 0**

**Physical: 0**

**PPE: A**

**Potential Health Effects (Acute and Chronic):** Adverse reproductive effects have been reported in animals. Prolonged or repeated skin contact may cause dermatitis. May cause liver and kidney damage.

# SAFETY DATA SHEET

## Bio-Zyme O

**Inhalation:** Low hazard for normal industrial handling. Inhalation of a mist of this material may cause respiratory tract irritation.

**Skin Contact:** Causes skin irritation.

**Eye Contact:** Causes severe eye irritation.

**Ingestion:** Harmful if swallowed. May cause gastrointestinal irritation with nausea, vomiting and diarrhea.

### SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

CAS #	Hazardous Components (Chemical Name)	Concentration
57-55-6	Propylene glycol {1,2-Propanediol }	3.0 -10.0 %
10043-35-3	Boric acid	1.0 -5.0 %
141-43-5	Ethanol, 2-Amino- {Ethanolamine;beta-Aminoethyl alcohol; Monoethanolamine}	1.0 -3.0 %

### SECTION 4: FIRST-AID MEASURES

**Emergency and First Aid Procedures:** Persons with impaired kidney function may be more susceptible to the effects of this substance. Consult a physician. Show this safety data sheet to the doctor in attendance.

**In Case of Inhalation:** If breathed in, move person into fresh air. Consult a physician.

**In Case of Skin Contact:** In case of contact, flush skin with plenty of water. Remove contaminated clothing and shoes. Get medical aid if irritation develops and persists.

**In Case of Eye Contact:** In case of contact, immediately flush eyes with plenty of water for a t least 15 minutes. Consult a physician.

**In Case of Ingestion:** Never give anything by mouth to an unconscious person. Get medical aid. Rinse mouth with water.

**Note to Physician:** None known.

### SECTION 5: FIRE-FIGHTING MEASURES

**Flash Point:** NP Method Used: Estimate

**Explosive Limits:** LEL: UEL:

**Autoignition Pt:** NA

**Suitable Extinguishing Media:** Use water spray, dry chemical, carbon dioxide, or chemical foam.

**Fire Fighting Instructions:** As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Material will not burn.

**Flammable Properties and Hazards:**

### SECTION 6: ACCIDENTAL RELEASE MEASURES

**Steps To Be Taken In Case Material Is Released Or Spilled:** Use proper personal protective equipment as indicated in Section 8. Spills/Leaks: Avoid generating dusty conditions. Do not let this chemical enter the environment. Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container.

### SECTION 7: HANDLING AND STORAGE

**Precautions To Be Taken in Handling:** Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Avoid contact with eyes, skin, and clothing. Keep container tightly closed. Avoid ingestion and inhalation.

**Precautions To Be Taken in Storing:** Store in a tightly closed container. Store in a cool, dry, well-ventilated area.

### SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

CAS #	Partial Chemical Name	OSHA TWA	ACGIH TWA	Other Limits
57-55-6	Propylene glycol {1,2-Propanediol }			
10043-35-3	Boric acid			
141-43-5	Ethanol, 2-Amino- {Ethanolamine; beta-Aminoethyl alcohol; Monoethanolamine}			

**Respiratory Equipment (Specify Type):** Respirator protection is not normally required.

**Eye Protection:** Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

**Protective Gloves:** Protective garments not normally required.

**Other Protective Clothing:** Protective garments not normally required.

**Engineering Controls (Ventilation etc.):** There are no special ventilation requirements.

**Work/Hygienic/Maintenance Practices:** Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

# SAFETY DATA SHEET

## Bio-Zyme O

### SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

**Physical States:** [ ] Gas [ X ] Liquid [ ] Solid  
**Appearance and Odor:** Clear orange liquid  
Surfactant odor.  
**Melting Point:** NA  
**Boiling Point:** NA  
**Autoignition Pt:** NA  
**Flash Pt:** NP Method Used: Estimate  
**Explosive Limits:** LEL: UEL:

**Specific Gravity (Water = 1):** ~ 1.03  
**Vapor Pressure (vs. Air or mm Hg):**  
**Vapor Density (vs. Air = 1):**  
**Evaporation Rate:**  
**Solubility in Water:** Complete  
**Percent Volatile:**  
**Viscosity:** Thin  
**pH:** 8-9

### SECTION 10: STABILITY AND REACTIVITY

**Stability:** Unstable [ ] Stable [ X ]  
**Conditions To Avoid - Instability:** None.  
**Incompatibility – Materials To Avoid:** None.  
**Hazardous Decomposition Or Byproducts:** Carbon monoxide, Carbon dioxide, Hazardous decomposition products formed under fire conditions.  
**Possibility of Hazardous Reactions:** Will occur [ ] Will not occur [ X ]  
**Conditions To Avoid -Hazardous Reactions:**

### SECTION 11: TOXICOLOGICAL INFORMATION

**Toxicological Information:** Epidemiology: No information found. Teratogenicity: Teratogenic effects have occurred in experimental animals. Reproductive Effects: .The acute oral toxicity of this product has not been tested. When sodium silicates were tested on a 100% solids basis, their single dose acute oral LD50 in rats ranged from 1500 mg/kg to 3200 mg/kg. Acute lethality resulted from nonspecific causes. Mutagenicity: No information found Mutation in microorganisms: See actual entry in RTECS for complete information. Neurotoxicity: Other Studies: No data available. Teratogenicity: No data available.

**Carcinogenicity/Other Information:** CAS# 57-55-6: Not listed by ACGIH, IARC, NTP, or CA Prop 65. CAS# 10043-35-3: Not listed by ACGIH, IARC, NTP, or CA Prop 65. CAS# 7732-18-5: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

CAS #	Hazardous Components (Chemical Name)	NTP	IARC	ACGIH	OSHA
57-55-6	Propylene glycol {1,2-Propanediol }	n.a.	n.a.	n.a.	n.a.
10043-35-3	Boric acid	n.a.	n.a.	n.a.	n.a.
141-43-5	Ethanol, 2-Amino- {Ethanolamine; beta-Aminoethyl alcohol; Monoethanolamine}	n.a.	n.a.	n.a.	n.a.

### SECTION 12: ECOLOGICAL INFORMATION

**General Ecological Information:** Ecotoxicity: Water flea Daphnia: EC50 10000 mg/L; 48 Hr Unspecified, Bacteria: Phytobacterium phosphoreum: EC50 = 710 mg/L; 30 min; Microtox test Fish: Goldfish: LC50 5000 mg/L; 24 Hr; Unspecified Fish: Guppy: LC50 1000 mg/L; 48 Hr; Unspecified If released to water, 1,2-propanediol is expected to degrade relatively rapidly via biodegradation. If released to soil, relatively rapid biodegradation should also occur. Significant leaching in soil can be predicted. If released to the atmosphere, it is degraded rapidly by reaction with photochemically produced hydroxyl radicals (typical half-life of 32 hr). Aquatic toxicity: LC50 Bluegill sunfish: 2.35 ppm 96 hours LC50 Rainbow trout: 7.8 ppm 96 hours Physical: No information available. Other: No information available. Boric acid is a water-soluble white powder that may, at high concentrations, cause damage to trees or vegetation by root absorption.

### SECTION 13: DISPOSAL CONSIDERATIONS

**Waste Disposal Method:** Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification. RCRA P-Series: None listed. RCRA U-Series: None listed. Product. This combustible material may be burned in a chemical incinerator equipped with an afterburner and scrubber. Observe all federal, state, and local environmental regulations. Contact a licensed professional waste disposal service to dispose of this material. Contaminated packaging.

### SECTION 14: TRANSPORTATION INFORMATION (DOT/UN CLASSIFICATION)

**LAND TRANSPORT (US DOT): DOT Proper Shipping Name:** Not regulated.  
**DOT Hazard Class:** NA None  
**UN/NA Number:** None

# SAFETY DATA SHEET

## Bio-Zyme O

### SECTION 15: REGULATORY INFORMATION

#### EPA SARA (Superfund Amendments and Reauthorization Act of 1986) Lists

CAS #	Hazardous Components (Chemical Name)	S. 302 (EHS)	S. 304 RQ	S. 313 (TRI)
57-55-6	Propylene glycol {1,2-Propanediol }	No	No	No
10043-35-3	Boric acid	No	No	No
141-43-5	Ethanol, 2-Amino- {Ethanolamine; beta-Aminoethyl alcohol; Monoethanolamine}	No	No	No

#### CAS # Hazardous Components (Chemical Name)

57-55-6 Propylene glycol {1,2-Propanediol }

10043-35-3 Boric acid

141-43-5 Ethanol, 2-Amino- {Ethanolamine; beta-Aminoethyl alcohol; Monoethanolamine}

#### Other US EPA or State Lists

CAA HAP,ODC: No; CWA NPDES: No; TSCA: Yes - Inventory; CA PROP.65: No

CAA HAP,ODC: No; CWA NPDES: No; TSCA: Yes - Inventory; CA PROP.65: No

CAA HAP,ODC: No; CWA NPDES: No; TSCA: Yes - Inventory; CA PROP.65: No

### SECTION 16: OTHER INFORMATION

**Revision Date:** 03/18/2015

**Preparer Name:** Regulatory Affairs

**Additional Information About This Product:**

**Company Policy or Disclaimer:** The information contained in this Safety Data Sheet is provided pursuant to current OSHA regulations to convey information concerning the hazardous nature of the named product. The information supplied was compiled from the most reliable sources available at the time of preparation and in light of the most reasonable foreseeable exposure situations expected from the intended use of this product. The material(s) may present greater or lesser hazard exposure under other circumstances that are beyond the control of the manufacturer. Therefore it is imperative that all directions and warnings on the product label be read and closely followed.