

# **ENZYME & CLARIFIER**

SDS Number: 298

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## **PRODUCT AND COMPANY IDENTIFICATION**

## Manufacturer

BIO-DEX LABORATORIES, LLC 4212 W. INNOVATION DR. PHOENIX, AZ 85086

Contact:	<b>BIO-DEX LABORATORIES, LLC</b>
Phone:	800-617-3477 // 623-582-2400
Web:	www.bio-dex.com

Enzyme & Clarifier )1/12/2021
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MIXTURE Flocculant Polymer with Enzyme
** PROPRIETARY ***
Swimming Pool Water Clarifying Solution with enzyme
Biodegradable Polymer Solution with Enzyme for Commercial Pools

**Emergency Phone:** 

(800) 424-9300 (CHEMTREC)

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# HAZARDS IDENTIFICATION

NFPA: HMIS III:



Health = 0, Fire = 0, Reactivity = 0 H0/F0/PH0 HMIS III



PERSONAL PROTECTION INDEX			
А	N BA		୭ଷ+ 🖛 + 💥
в	B 🕫 + 🗲		ᠪᠯ+≤+++₩
С	ळ्य + 🛋 + 📥	0	፼ૡ+≢+¥
D	D 😰 + 🖛 + 🛉		☞+ 🖛 + 🖌 + 🐝
Ε	E 🕫 + 🗲 + 🎯		🖏 + 🗲 + 🏌 + 👢
F	ØR + 🛥 + 🛉 + 🎯	Х	Consult your supervisor or S.O.P. for "SPECIAL" handling directions
A Ø Safety Glasses	N n O P Splash Goggles Eye Protection Glov	•	Boots Synthetic Apron
t Dust Respirator	Vapor Respirator		Z Additional Information

**GHS** Precautionary Statements:

DP264 - Wash skin thoroughly after handling.

DP302+352 - IF ON SKIN: Wash with soap and water.

DP305+351+338 - IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.

DP332+313 - If skin irritation occurs: Get medical advice/attention.

DP337+313 - If eye irritation persists: Get medical advice/attention.

DP362 - Take off contaminated clothing and wash before reuse.



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DP501 - Dispose of contents/container to an approved waste disposal plant.

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# **COMPOSITION/INFORMATION ON INGREDIENTS**

#### Ingredients:

Cas # I Percentage	I Chemical Name

N/A I 100% I Proprietary, non-hazardous, non-regulated

4	FIRST AID MEASURES	
Inhalation:	Give oxygen or artificial respiration if needed. If symptoms develop, move victim to fresh air. If symptoms persist, obtain medical attention.	
Skin Contact:	Promptly flush skin with water for at least 15 minutes to ensure all chemical is removed. Remove contaminated clothing and wash before reuse. If reddening develops and/or persists, obtain medical attention.	
Eye Contact:	Flush with large amounts of water for at least 15 minutes, lifting upper and lower lids occasionally. Remove contact lenses is present and easy to do so. If eye irritation persists, obtain medical attention.	
Ingestion:	Rinse mouth with water. Do NOT induce vomiting unless instructed to do so. Give 3-4 glasses of water or milk to dilute stomach contents. Never give anything by mouth to an unconscious person. If symptoms develop and/or persist, obtain medical attention.	

### Most important symptoms and effects, both acute and delayed:

The most important known symptoms and effects are described in the labelling (see Section 2) and/or Section 11.

#### Indication of any immediate medical attention and special treatment needed: No data available.

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## FIRE FIGHTING MEASURES

Flammability:	Not flammable
Flash Point:	DNA
Flash Point Method:	DNA
Burning Rate:	No data available
Autoignition Temp:	No data available
LEL:	No data available
UEL:	No data available

#### **Extinguishing Media:**

Water Spray Water Fog Carbon Dioxide Alcohol-Resistant Foam Dry Chemical

**Special Hazards Arising From the Substance or Mixture:** Carbon Oxides Hydrochloric Acid gas



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Nitrogen Oxides (NOx) Sodium Oxides

## Advice for Firefighters:

Firefighters should wear full-face, positive-pressure respirators.

### **Further Information:**

If incinerated, may release toxic fumes. Use water spray to cool unopened containers. See Section 7 for more information on safe handling. See Section 8 for more information on personal protection equipment. See Section 13 for disposal information.

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# ACCIDENTAL RELEASE MEASURES

## Personal Precautions, Protective Equipment and Emergency Procedures:

Use personal protective equipment. Keep from contacting skin or eyes. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.

## **Environmental Precautions:**

Prevent further release (leakage/spillage) if safe to do so.

## Methods and Materials for Containments and Cleaning Up:

Absorb with liquid-binding material (sand, diatomite, universal binders, sawdust). Place contaminated material into suitable, closed containers for disposal. Dispose of contaminated material according to Section 13. After spillage has been collected, area may be flushed with water or wet-brushed. Ensure adequate ventilation.

#### **Reference to Other Sections:**

See Section 7 for information on safe handling. See Section 8 for information on personal protection equipment. See Section 13 for information on proper disposal.

### 7 HANDLING AND STORAGE Handling Precautions: Avoid contact with eyes, skin, or clothing. Keep containers closed when not in use. Do not expose containers to open flame, excessive heat, or direct sunlight. Do not smoke, eat or drink when using this product. Do not puncture or drop containers. Handle with care and avoid spillage on the floor. Keep material out of reach of children. Keep material away from incompatible materials. Wash thoroughly after handling. Ensure adequate ventilation. Keep container tightly closed. Storage Requirements: Do not store in direct sunlight. Store away from strong bases, strong oxidizing agents, Iron and Iron salts, Steel (all types



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and surface treatments), Copper and Aluminum.

# S **EXPOSURE CONTROLS/PERSONAL PROTECTION Engineering Controls:** All ventilation should be designed in accordance with OSHA standard (29 CFR 1910.94). Use local exhaust at filling zones and where leakage and dust formation is probable. Use mechanical (general) ventilation for storage areas. Use appropriate ventilation as required to keep Exposure Limits in Air below TLV & PEL limits. **Personal Protective Equip:** Eye/face protection: When using material use safety glasses according to HMIS PP, A. All safety equipment should be tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU). Skin protection: Not required. If desired, handle with gloves made from PVC, Neoprene, Nitrile or Buma rubber. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact. Dispose of contaminated gloves according to applicable laws and laboratory practices. Body Protection: Chemically resistant safety glasses are recommended. Type of protective equipment should be selected based on concentration amount and conditions of use of this material. Respiratory protection: Full-face vapor respirator may be required as backup to engineering controls when proper engineering controls are not in place to keep TLV and PEL limits below defined thresholds. Respiratory protection must comply with 29 CFR 1910.134. Control of environmental exposure: Prevent leakage or spillage if safe to do so. Do not let material enter drains. Components with workplace control parameters:

Contains no substances with occupational exposure limit values.

## **Biological occupational exposure limits:**

Contains no substances with biological occupational exposure limit values.



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# Satety Data Sheet (SDS) BIO-DEX LABORATORIES, LLC

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## PHYSICAL AND CHEMICAL PROPERTIES

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Appearance:	Clear, colorless to light gold liquid		
Physical State:	Liquid	Odor:	Mild
Odor Threshold:	Not determined	Molecular Formula:	MIXTURE
Particle Size:	Not determined	Solubility:	100%
Spec Grav./Density:	1.006 - 1.020 g/ml (8.40 - 8.51 lbs/gal)	Softening Point:	Not determined
Viscosity:	Not determined	Percent Volatile:	79.51%
Sat. Vap. Conc.:	Not determined	Heat Value:	Not determined
Boiling Point:	> 100 °C (212 °F)	Freezing/Melting Pt.:	< 0 °C (32 °F)
Flammability:	(solid, gas): Not flammable	Flash Point:	DNA
Partition Coefficient:	Not determined	Octanol:	Not determined
Vapor Pressure:	(mm Hg @ 25 °C): < 0.01	Vapor Density:	(air = 1): Same as water
pH:	@ 100%: 5.0 - 8.0	VOC:	DNA
Evap. Rate:	(N-Butyl Acetate = 1): Not determined	Bulk Density:	Not determined
Molecular weight:	MIXTURE	Auto-Ignition Temp:	Not determined
Decomp Temp:	Not determined	UFL/LFL:	Not determined

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# STABILITY AND REACTIVITY

Stability:	Product is stable under normal conditions.
Conditions to Avoid:	Incompatibilities, flames, ignition sources.
Materials to Avoid:	Strong bases, strong oxidizing agents, Iron and Iron salts, Steel (all types and surface treatments), Copper and Aluminum.
Hazardous Decomposition: Hazardous Polymerization:	Carbon Oxides, Hydrochloric Acid gas, Nitrogen Oxides (NOx) and Sodium Oxides. Will not occur.

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## **TOXICOLOGICAL INFORMATION**

Component(s): Clearex 500 CAS No(s): N/A

Acute Toxicity: LD50 Oral - Rat: 14,600 mg/kg LD50 Dermal - Rabbit: > 20,000 mg/kg

Skin Corrosion/Irritation: Prolonged contact may cause skin irritation.

Serious Eye Damage/Eye Irritation: Prolonged contact may cause eye irritation.

Respiratory or Skin Sensitation: Does not cause sensitization.

Germ Cell Mutagenicity: No data available.

## Carcinogenicity:

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.



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NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive Toxicity: No data available.

Specific Target Organ Toxicity · Single Exposure: No data available.

Specific Target Organ Toxicity · Repeated Exposure: No data available.

Aspiration Hazard: No data available.

Additional Information: No data available.

## **ECOLOGICAL INFORMATION**

Component(s): Clearex 500 CAS No(s): N/A

## **Toxicity:**

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*Toxicity to fish:* LC50 - Oncorhynchus mykiss (Rainbow Trout): 0.74 mg/l (96 h) LC50 Danio rerio (Zebra Fish): 10 - 100 mg/l (96 h)

*Toxicity to daphnia and other aquatic invertebrates:* EC50 - Daphnia magne (Water Flea): 1.8 mg/l (48 h)

## Persistence and Degradability:

Readily biodegradable.

## **Bioaccumulative potential:**

This material is not expected to bioaccumulate.

## Mobility in Soil:

Soil/Sediment: 50 - 70%

## Results of PBT and vPvB assessment:

Not required/conducted.

## **Other Adverse Effects:**

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Toxic to aquatic life.

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## DISPOSAL CONSIDERATIONS

Product: Hazardous wastes shall be managed responsibly. All entities that store, transport or handle hazardous waste shall take the necessary measures to prevent risks of pollution, release into the environment or damage to people and animals. Contact a licensed professional waste disposal service to dispose of this material.

Contaminated Packaging: Dispose of as unused product.



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## **TRANSPORT INFORMATION**

**DOT (US)** Non-regulated material, liquid

**IMDG** Non-regulated material, liquid

ΙΑΤΑ

Non-regulated material, liquid

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## **REGULATORY INFORMATION**

COMPONENT / (CAS/PERC) / CODES

Proprietary, non-hazardous, non-regulated (N/A 100%) NJHS, PA, TSCA

REGULATORY KEY DESCRIPTIONS

NJHS = NJ Right-to-Know Hazardous Substances PA = PA Right-To-Know List of Hazardous Substances TSCA = Toxic Substances Control Act

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## **OTHER INFORMATION**

## **Disclaimer:**

The data in this Safety Data Sheet relates only to the specific material designated herein and does not relate to use in combination with any other material in any process. The information set forth herein is furnished free of charge and is based on technical data that BIO-DEX LABORATORIES, LLC. believes to be reliable. It is intended for use by persons having technical skill and at their own discretion and risk. Since conditions of use are outside of BIO-DEX LABORATORIES, LLC's control, BIO-DEX LABORATORIES, LLC. makes no warranties, expressed or implied, and assumes no liability in connection with any use of this information. Nothing herein is to be taken as a license to operate under, or a recommendation to infringe upon, any patents.

## **Preparation Information:**

GHS Conversion Services www.ghsconversionservices.com (414) 336-2546