

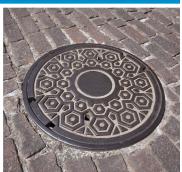
# **ECOSYSTEM PLUS®**

# BIO-CATALYTIC WATER & SLUDGE TREATMENT









**EcoSystem Plus®** is breakthrough bio-catalytic product that increases dissolved oxygen transfer rates and dissolved oxygen (DO) levels in the water column.

**EcoSystem Plus®** improves the biological oxidation performance of aerobic wastewater treatment systems, on a dose-responsive basis.

**EcoSystem Plus**® increases the solubility of organic wastes, including the more problematic FOG's (Fats, Oils, and Greases).

**EcoSystem Plus®** enhances anaerobic conversion rates in biogas fermenters. It allows for optimization and increased loading of TVS (Total Volatile Solids).

**EcoSystem Plus®** reduces the volume of sludge, improves sludge quality, and greatly reduces odorous volatile compounds (VOCs).

Key operational benefits include:

- Improves oxygen (DO) Transfer.
- Reduces aeration energy.
- Optimizes anaerobic digestion.
- Improves bio-solids and sludge management.
- · Reduces noxious odors.
- · Improves wastewater discharges.



# SEAL OF SAFETY™

The Bio-Organic Seal of Safety™ is our trademark declaration of our commitment to offering green biocatalytic solutions that shift the treatment of our water resources to a more sustainable ecological model.

## **DIRECTIONS FOR USE**

EcoSystem Plus® can be injected into water lines, aeration devices, and sludge lines. Dosage rates will vary depending on numerous factors, including organic loading levels, and specific operator objectives.

#### **Aerobic Wastewater Treatment:**

1 ppm **EcoSystem Plus®** per 100 BOD in organic loading is the basic metric used. In deployment, dissolved oxygen (DO) readings will guide dosing rate. Operator will adjust dosage rate to desired DO level.

Anaerobic Digestion: The basic dosage metric is: 250 ml up to 1,000 ml, per dry ton of Volatile Solids (VS).

Consult with technical specialist to optimize installation and performance of EcoSystem Plus®.

# **PRODUCT SPECIFICATIONS**

EcoSystem Plus® is non-toxic, non-caustic, and safe to handle, with a recommended shelf life of two years. May be stored with confidence at temperatures below 122°F/50°C.

#### CONTENTS

Water, highly purified yeast extracts, non-ionic surfactants.

Keep out of the reach of children. If product from this container splashes in eyes, rinse well with water.

#### Information on Basic Physical and Chemical Properties

Appearance

**Physical State** Liquid

Color Colorless - pale amber Odo

Mild

Full Strength Concentrate 3.9 - 4.3

At recommended use dilutions, pH ranges

6.3 to 6.9

**Freezing Point** See Pour Point

Boiling Point (760 mmHg) > 100 °C at 760 mmHg Calculated ASTM D 93 Closed Cup >93oC Flash Point

Density (water = 1) 1.002 @ 20°C / 20°C Water Solubility 100% in water **Kinematic Viscosity** @ 40oC 2 3373 cst Pour Point 2.22°C or (+28°F)

## **Environmental fate: Persistence and Degradability:**

The material is readily biodegradable. Passes OECD test(s) for ready biodegradability.

# **ECOSYSTEM PLUS®**

MANUFACTURED IN THE USA UNDER DOMESTIC AND INTERNATIONAL PATENTS

bio-organic.com