

A Bacteria Direct® product

A dry bacterial blend designed to remove organic matter from closed and slow-flow water systems therefore improving water clarity.

### What is it?

Powder containing application-specific microbes to remove organic matter from closed and slow-flow water systems therefore improving water clarity.

#### Uses

Degrades sludge, prevents future build up, and maintains water quality safe for sustaining aquatic life.

### **Eco credentials**

Contains nonpathogenic Class 1 microorganisms that are both environmentally responsible and safe for the end user.

### How it works

A combination of chemistry and microbiology work together to degrade organic matter and out-compete problem microbes.



## PRODUCT AT A GLANCE

Clarify™ powder is a bacteria based, application- specific product used to remove organic matter from a variety of water systems containing fishand animal wastesor decaying plant material.

Water clarity can be compromised by excess nutrients such as nitrogen, potassium and phosphorus.

A decrease in water quality poses threats to organisms in the water like fish, plants and other aquatic life. In addition, poor water quality makes it increasingly difficult for treatment plants to meet effluent permit limits.

bacteriadirect Clarify  $^{\text{TM}}$  uses bio-augmentation, a non-chemical and natural method, to reduce organic levels that threaten good water quality in ponds, lakes, lagoons etc.

The application-specific microbes in the product ingest carbon, phosphorous, potassium and nitrogen at an accelerated rate, which limits the organic loading available and improves water quality. This control increases water clarity and promotes overall better health for the aquatic environment.

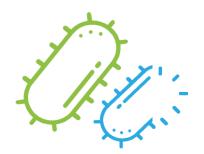
Use of Clarify $^{\text{TM}}$  aids treatment plants in meeting effluent regulations with decreased use of aerators and will save on energy costs.

## **APPLICATIONS**

- Ponds
- Lagoons
- · Fish farms
- Water gardens
- Ornamental fountain







## What is Bacillus?

Bacillus are a genus of Gram-positive microorganisms found across the globe in a range of environments.

They are metabolically diverse and with a few notable exceptions are non-pathogenic and safe to use. They are able to survive when conditions move outside of those needed for survival through the production of spores.

Spore formation allows this type of bacteria to be grown in very high concentrations and blended into a stable product with a long shelf-life.

This makes it ideal for industrial applications where often a large amount of Bacillus cells are needed to amend a system.

At bacteriadirect we ferment all our own bacteria to the highest standards (ISO 9001) so we can guarantee that the Bacillus we deliver are correct in both species and concentration and are free from contaminants. We have taken time to design our products to ensure they have minimal impact upon the environment and end user whilst at the same time offering an efficacious and prolonged result.

As Bacillus is our main technology, we ensure that we understand each of our isolates. We have invested in cutting edge genomic techniques to fully comprehend the potential of each of our Bacillus species, and in doing so we have created effective and truly application-specific technology. All of our products come with expert technical support as standard.





## FEATURES AND BENEFITS

- » Optimized proprietary bacterial consortium to degrade a broad range of organic matter for removal of fish and feed wastes
- Wide range of carriers available including eco-benign options
- ) Greatly reduces labor time
- )> Enhances COD/BOD/TSS removal
- » Reduces sludge build-up
- )) Changes Biomass dynamics
- Eliminates malodours at source
- » Safe, fast aquatic biological filter start-up and improved filter performance, reducing the frequency of water changes

- Neduces shock to pond life that can arise with large water changes
- » Removes the need for other chemical purification methods
- » Bacillus species 100% in spore form providing long product shelf life
- Manufactured in accordance with recognized international standards, ISO 9001



## **CASE STUDY**



1. Pond at initial time of treatment



2. Pond after 8 weeks of treatment (sames as spot 1)

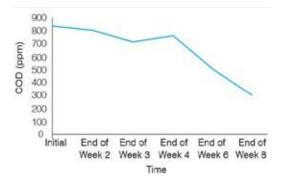


3. Pond at initial time of treatment



2. Pond after 8 weeks of treatment (sames as spot 3)

A large pond was treated with Clarify<sup>TM</sup> for 8 weeks during the summer months. Before treatment, the characteristics of the pond were very stagnant water, with no movement and no aeration, plus large amounts of organic material floating on the surface.





## PRODUCT SPECIFICATION

#### **Bacterial count**

5E+09 CFU/g

## Targeted compounds

Organic debris, sludge build-up, cellulose

## **Bacterial type**

Bacillus spores

#### Formula properties

Tan free flowing powder with an earthy odor on a dendritic salt carrier

(available in Canadian approved (CB) formulation)

### Effective pH range

4.0 - 11.0

## Effective temperature range

45-120°F (5-50°c)

#### **Packaging**

25lb and 50lb containers

Also available in 2oz, 4oz, 8oz and 16oz bio-pouches

Products may be blended in different carriers but order size minimums may apply - check with your sales representative for specific availability.

#### Shelf life

24 months in original, unopened container

## **CONTACT US**

Bacteria Direct is a web-based industrial strength bacteria supplier with warehousing in Colorado and Georgia.

For all inquiries: t: (970) 573-6842

e: info@bacteriadirect.com w: www.bacteriadirect.com