

# POLAR BLEND

COLD WEATHER LAKE & POND PROBIOTIC



## KEY BENEFITS & HIGHLIGHTS

- Dry powder formulation that is easy to apply in premeasured dissolvable packets
- Removes organic particles and reduces nutrients in the water column
- Optimized for biological nutrient removal in cold water environments 41 - 60°F (51 - 15.5°C).
- Safe for fish and other aquatic organisms

**Polar Blend** is dry probiotic (beneficial bacteria) formulation that improves water quality and restores balance in water bodies. As part of the Temperature Driven Solution product line (Polar Blend, Nature's Blend, Summer Slam), this cold water formulation excels between 41 - 60°F (51 - 15.5°C). Polar Blend is enhanced with psychrophilic microorganisms and select stimulants to ensure optimal performance in colder water. This formulation targets soluble nutrients and organic particles in the water column. It boosts floc formation of free bacteria, stimulates biological nutrient removal and digests organic particles.

Polar Blend should be applied by distributing the dissolvable packets evenly over the surface of the water body or near a location that promotes mixing (fountain, waterfall, etc). Polar Blend excels when used alone or after pesticide treatments to replenish the microbial community. Polar Blend **DOES NOT** kill algae or aquatic plants.

Polar Blend is recommended for use in lakes, ponds, water gardens, reservoirs and similar water bodies. This product is nontoxic and will not harm fish or other aquatic organisms.



# Optimizing Copper-Based Algaecide Applications with Biological Products

## Dose Rate

ONCE EVERY 2-4 WEEKS

Do not mix directly with algaecides or herbicides. If used in conjunction with algaecides or herbicides, apply Polar Blend after chemical treatments for best results.

## Available Sizes

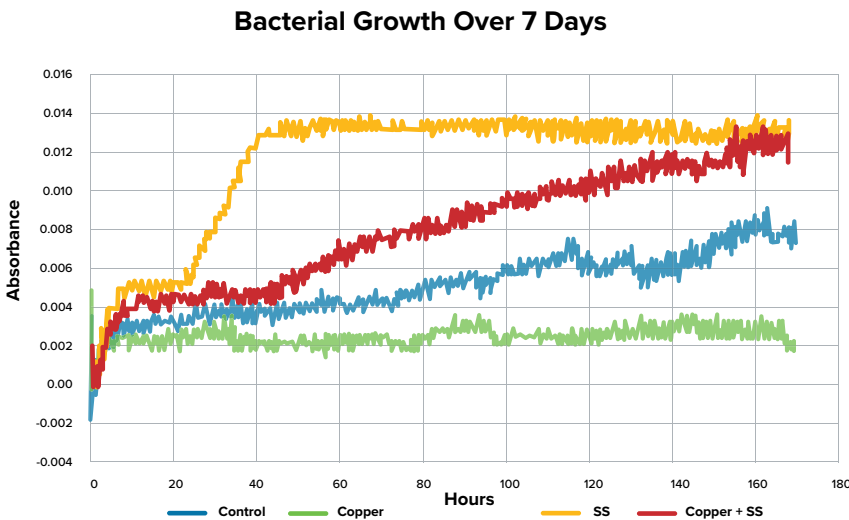
- 10 lb container, ½ lb water soluble packets
- 10 lb container, 1 lb water soluble packets
- 30 lb container, ½ lb water soluble packets
- 30 lb container, 1 lb water soluble packets
- 30 lb container, bulk



## Background

Certified applicators are well-educated on copper interactions, which is why reducing the amount of copper applied during an application and the frequency of treatments needed to maintain desired lake conditions is a primary management goal. A foundational step in improving water quality involves incorporating biological products (bacterial-based) with or following algaecide treatments.

Applying biological products along with a copper-based algaecide can mitigate the negative impacts on the microbial community within a water body. Additionally, the use of a biological product can enhance bacterial abundance beyond natural growth conditions, even when it is directly mixed with copper in the tank.



Adding biological products can extend the treatment’s effectiveness time by

300 %  
to  
400%

compared to copper alone.

[Read the full study here](#)



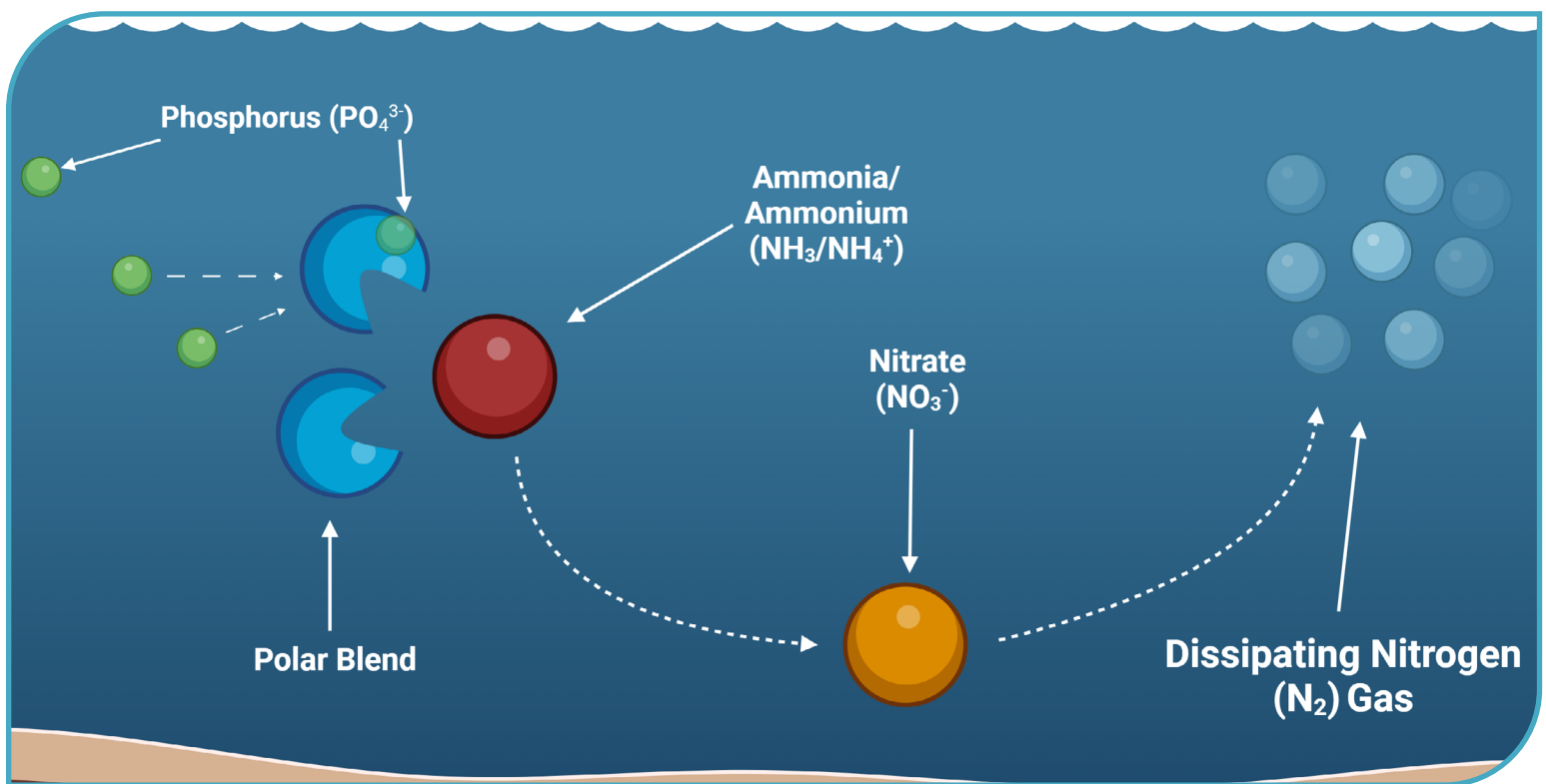
## Professional Tip

MuckBiotics Zero and Polar Blend can be used together to target organic matter in the sediment and the water column at the same time.



# The Science Behind It

Water bodies have stress from both internal and external sources. Excessive rains or draught combined with ongoing use of algaecides and herbicides and cold temperatures deplete microbial communities that are fundamental to nutrient removal. As a result, water bodies are left with elevated nutrient levels that enhance plant growth, algal blooms, and HABs when the water warms.



Polar Blend was formulated through years of research by obtaining water samples from lakes and ponds across the United States when water temperatures were between 41- 60 degrees F (5 – 15.5 C). The natural microbial communities in the samples were analyzed to understand population densities and the specific organisms that are depleted by stresses. This research is how Natural Lake Biosciences was able to create a probiotic that supplements the natural psychrophilic organisms and support indigenous organisms that are functional and native to the geography. Polar Blend is more than simple additions of beneficial bacteria. It is a scientifically formulated probiotic that plays a key role in nitrogen and phosphorus uptake. Real science. Real results.