

OCION - CORE TECHNOLOGY AND PRODUCTS

OCION Water Sciences Group develops, manufactures and markets environmentally responsible mineral-based products for applications in many industries, including drinking water, agriculture, livestock, and wastewater-treatment. All of OCION's products are designed with both the environment and the end user in mind. The products provide practical, cost-effective, easy-to-handle and environmentally responsible solutions to challenges faced by these industries. OCION's unique products are listed in the table below.

THE OCION ADVANTAGE

OCION's Aqueous Ion Matrix (AIM) technology enhances the natural antimicrobial properties of mineral ions. AIM provides long-lasting stability of active mineral ions in a wide range of water conditions, using only minute quantities of minerals while providing maximum biological efficacy. Because of AIM, OCION products do not precipitate or stratify, unlike many competitor products. Instead, OCION products disperse evenly in water for maximum effectiveness. All ingredients used in OCION products have been Generally Recognized As Safe (GRAS) by the US FDA, when applied at label rates.

HOW IT WORKS

Positively-charged mineral ions in OCION's products form electrostatic bonds with negatively-charged areas around target micro-organisms. This bonding disrupts the cell wall permeability, affecting nutrient intake and eventually leading to cell lysis (disintegration).

Most undesirable micro-organisms are killed at low mineral ion concentrations, whereas important beneficial bacteria are more tolerant to copper and will survive .

OCION provides the following natural mineral- based algicides, fungicides and bactericides:

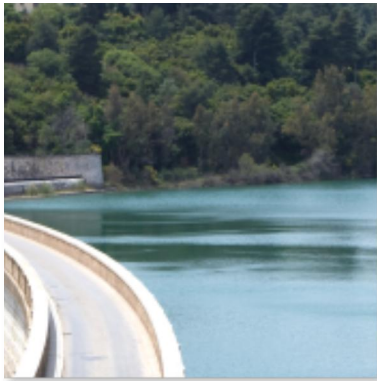
OCION PX10	To control algae, bacteria* and nuisance aquatic plants in water
OCION PT81	To control many plant diseases in crops
OCION PF91	To reduce spoilage and extend freshness in harvested fruits and vegetables
OCION BD41	To control bacteria*, and bacterial odors in wastewater and sludge

* Non-Public health bacteria

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OCION PX10 Certified for use in Drinking Water

OCION PX10 has been certified by the National Sanitation Foundation (NSF) and the American National Standards Institute (ANSI) for use in drinking water. OCION PX10 is tough on bacteria*, and algae, but is completely safe for human consumption, when applied at label rates. OCION PX10 contributes to clean* water, whether for drinking, irrigation, industry, or recreation.



Lake Marathon, a water reservoir in Athens treated with OCION PX10

OCION PX10 controls algae, bacteria*, and nuisance aquatic plants in:

- ✓ Streams & Canals
- ✓ Lagoons
- ✓ Ditches
- ✓ Lakes
- ✓ Irrigation Systems
- ✓ Swimming Areas
- ✓ Rice Fields[†]
- ✓ Aquaculture Ponds
- ✓ Reservoirs (Potable & Irrigation)
- ✓ Ponds (Farm, Industrial, Golf-Course)
- ✓ Livestock Watering Systems
- ✓ Decorative Water Features

OCION BD41 Reduces Noxious Odours in Wastewater

OCION BD41 is a bactericide* that reduces the bacteria that produce noxious gasses in wastewater treatment, sewage lagoons, feedlot run-off pits, animal confinement facilities, waste tanks, digesters, and manure pits. OCION BD41 also improves mixing, prevents stratification in liquid wastes, and reduces anoxic conditions in wastewater, sludge, or manure.

Use OCION BD41 to:

- ✓ Stop the separation of waste solids
- ✓ Reduce noxious gasses
- ✓ Control odour
- ✓ Regulate undesirable bacteria*
- ✓ Improve manure consistency
- ✓ Reduce fly problems



*Non-Public Health Bacteria

[†]OCION PX10 also controls tadpole shrimp in wild and domestic rice fields.



OCION PT81 Effectively Controls Plant Diseases

OCION PT81 is a foliar spray for the control of many bacterial* and fungal plant diseases, and nuisance algae. OCION PT81 replaces harmful synthetic chemical pesticides with natural mineral ions, including copper, and provides high efficacy at low application rates. OCION PT81 may be used in Greenhouses, Nurseries, and Fields.



OCION PT81 may be used on the following types of plants:

- ✓ Food crops
- ✓ Non- food crops
- ✓ Shrubs
- ✓ Trees
- ✓ Vines
- ✓ Tropical Foilage
- ✓ Annual & Perennial Plants
- ✓ Potted Flowering Plants

OCION PT91 Provides Long-Lasting Freshness

OCION PF91 is a post-harvest raw fruit and vegetable wash that reduces the bacteria* and fungi that cause spoilage, extending shelf-life and providing long-lasting freshness. OCION PF91 is odourless♦ and tasteless♦, reducing the bacteria* on fresh fruits and vegetables without adding an unpleasant aftertaste♦. Food treated with OCION PF91 is completely safe for human consumption ♦, as OCION uses only natural mineral ions to reduce surface bacteria* and fungi.



♦ When applied on post-harvest fruits and vegetables at label rates.

*Non-public health bacteria.



OCION LI12.5 Superior Water Line Cleaning

OCION LI12.5 dissolves tough-to-remove mineral scale in greenhouse, nursery, and farm irrigation water lines. Use it in conjunction with OCION PX10 to keep water lines clean and clear of scale and biological growth.

The products listed in this bulletin are registered for use in the USA, but permitted applications and availability vary by jurisdiction. Please contact your OCION distributor for availability in your area.