



PRODUCT GUIDE

Fresh Produce Preservation

- Technology
- Product Assortment
- Extend Freshness, Reduce Waste
- Maintenance



UV Light Technology Eliminates Mold, Bacteria and Ethylene Gas

Revolutionizing Food Preservation with Bluezone® Technology

Bluezone® by Middleby utilizes ultraviolet-enhanced oxidation technology, offering a revolutionary approach to food preservation. Unlike traditional methods that capture contaminants in particle filters or activated carbon, Bluezone effectively eliminates or transforms chemical and biological impurities. It eradicates harmful microbes like powdery mildew and botrytis, and breaks down chemicals, resulting in air that exits the Bluezone clean and fresh. Specifically developed for ethylene destruction, the Bluezone Model 2400 extends the shelf life of produce in U.S. Army fresh fruit and vegetable shipping containers sent to troops overseas.

Bluezone operates by drawing air into a self-contained reaction chamber, where ultraviolet-enhanced oxidation neutralizes contaminants. To maximize the kill-rate, it targets airborne impurities. Ethylene is converted into H₂O and CO₂ through an oxidation process. Other airborne contaminants, such as powdery mildew or botrytis, are instantly destroyed by Bluezone's internal ultraviolet light. The oxidation and ultraviolet irradiation occur entirely within the reaction chamber, which is designed to address specific microbial and chemical contaminants in refrigerated storage. Bluezone is CARB certified for ozone emissions, ensuring ozone remains within the reaction chamber.

Nearly Doubles Shelf Life of Produce

- Eliminates 99.9% of mold, bacteria and ethylene gas
- Extends shelf life (additional 7 - 10 days on average)
- Minimizes food waste
- Reduces need for chemical solutions to combat decay
- Removes unpleasant odors and eliminates taste transfer
- NO ethylene build-up
- Enables for the mixed storage of produce varieties despite varying levels of ethylene emissions & sensitivity
- Reduces mold build-up on walk-in walls



MODEL 2400 FOOD PRESERVATION FOR WALK-INS AND COLD STORAGE



Model 2400

Item#: 10-BZ-2400FP

Treatment Area: 15,000 Cubic Feet per Unit

Installation Options: Hung from Ceiling, Shelf

- 4 UV Bulbs (1 year life)
- Operating Environment 34°F-104°F (1°C- 40°C)
- Display screen indicates status, including bulb operation and bulb life counter
- Easy to clean - no contaminated filters to replace



A controlled study tested Bluezone's ability to extend the shelf life of strawberries over 10 days. The result? Strawberries stored with Bluezone had significantly less mold growth, slower ripening, and reduced odors compared to those stored without it.

MODEL 300 FOOD PRESERVATION FOR WALK-INS AND COLD STORAGE



Model 300

Item#: 10-BZ-300FP

Treatment Area: 4,000 Cubic Feet per Unit

Installation Options: Hung from Ceiling, Shelf

- 2 UV Bulbs (1 year life)
- Operating Environment 34°F-104°F (1°C- 40°C)
- Display screen indicates status, including bulb operation and bulb life counter
- Easy to clean - no contaminated filters to replace



Eliminating ethylene helps fruits and vegetables preserve their color, texture, and flavor. Without Bluezone technology, prolonged storage of mixed batches can cause over-ripening, russet spotting, bitterness, softness, decay, or hardening of the produce.

EXTEND FRESHNESS **REDUCE WASTE**

Bluezone food preservation technology is commercially utilized to prolong the shelf life of fresh fruits and vegetables in transport containers, cold storage rooms, walk-in refrigerators, reach-in refrigerators, and general food storage areas throughout the global food supply chain, including storage, distribution, transport, and retail sale.

- Ethylene causes overripening and product loss in produce
- Bacteria and mold threaten walk-in contents with infection and decay
- VOCs (volatile organic compounds) cause unpleasant transfers of flavor



Once a Year Bulb Change

After the initial investment of a Bluezone unit, the only requirement is to change out the UV-C bulbs once a year, a task easily managed by a service technician or the facilities staff.

- Bulb life up to 8,800 hours or one year of continuous operation
- Display counts down bulb life and indicates when to replace bulbs
- NO filters to buy or replace

