

**EnozO<sub>3</sub>**



**EcO<sub>3</sub>Ice**



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**EnozO<sub>3</sub>**

# Enozo EcO<sub>3</sub>Ice - Introduction

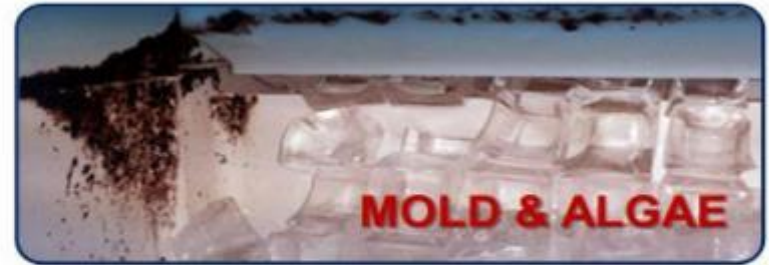
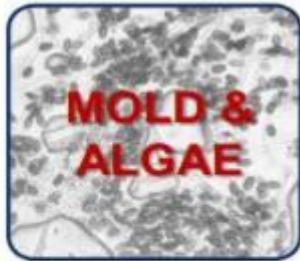
- EcO<sub>3</sub>Ice Antimicrobial Ice Protection Device is a portable, on-demand diamond electrolytic ozone generator that introduces Aqueous Ozone into the water supply for commercial ice machines.
- EcO<sub>3</sub>Ice provides a small amount of Aqueous Ozone that works to reduce bacterial levels in water and throughout the ice making process inside of the ice machines.
- A residual amount of Aqueous ozone gets trapped inside the ice as it is manufactured, allowing for your ice product to be bacteria free while remaining tasteless, odorless, and safe for consumption.



Two months using EcO<sub>3</sub>Ice. Same evaporator in pictures.

**The challenge:**

**Ice contamination is real**



# Enozo EcO<sub>3</sub>Ice Basics

- Attaches quickly and easily to the incoming water line of ice machine
- Runs silently and automatically
- Uses an operator-replaceable, “twist-on” electrolytic cartridge;  
lasts 6 to 24 months on average
- LED indicator lights show status and tell when it’s time to replace the cartridge
- EcO<sub>3</sub>Ice was created to protect ice....because.....



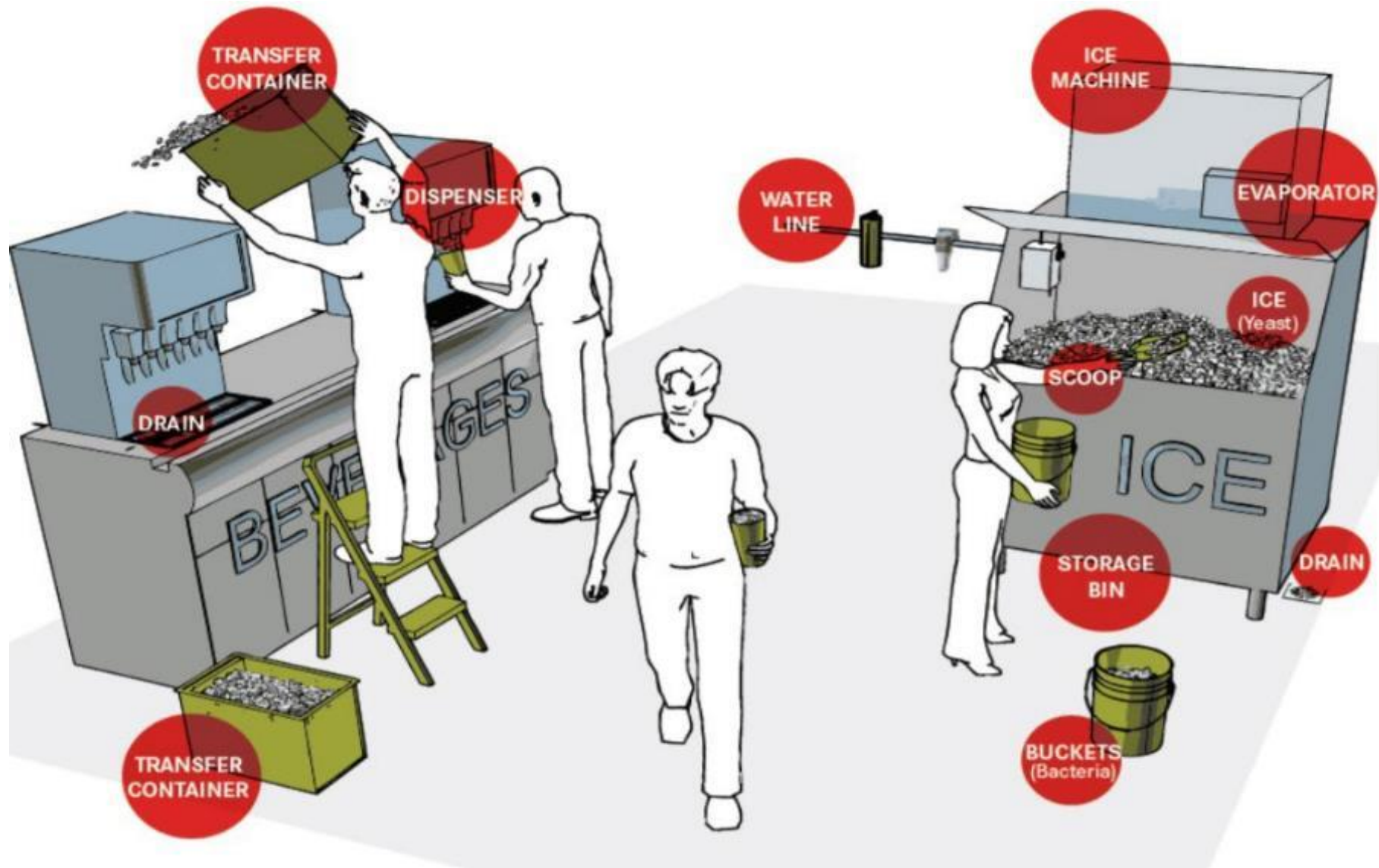
...is food

...is everywhere



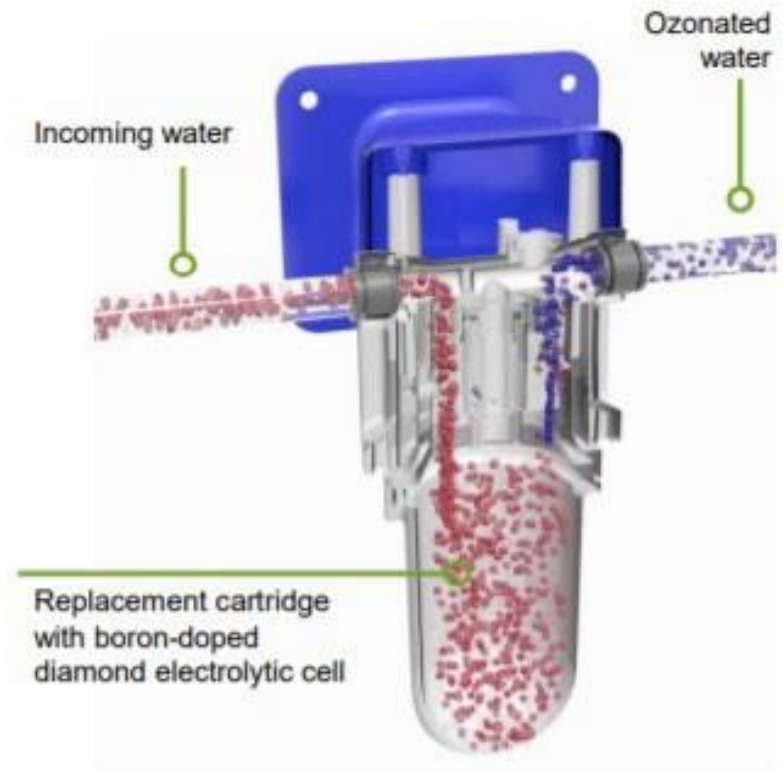
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Enozo<sub>3</sub>



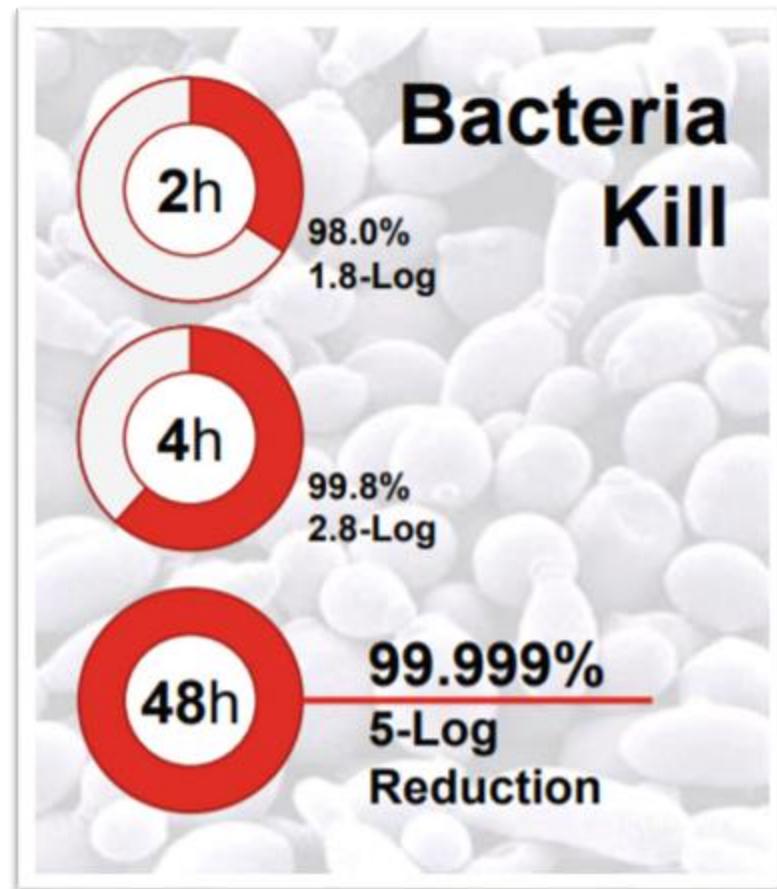
# The Solution- Enozo EcO<sub>3</sub>Ice

- EcO<sub>3</sub>Ice Antimicrobial Ice Protection uses a unique, industrial diamond-based technology to create a very small but effective amount of pure, aqueous ozone-- nature's own sanitizer.
- Ozonated water circulates throughout the system, killing microbes on every surface it touches and retarding regrowth.
- The aqueous ozone reduces slime build-up on evaporator, pump, sump, water curtain, hoses, pipes & much more.
- A residual amount of ozone gas infiltrates hard-to-reach places.



# Enozo EcO<sub>3</sub>Ice- KILLS Microbes

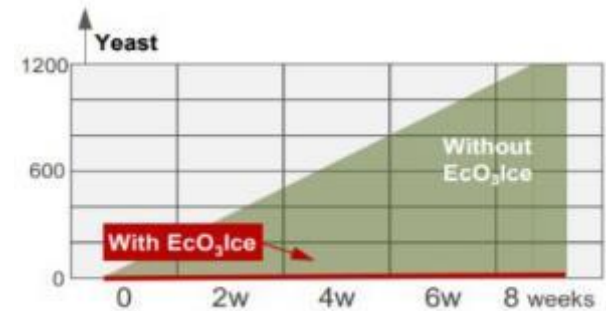
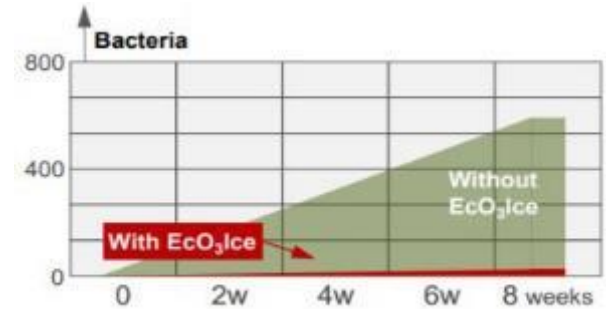
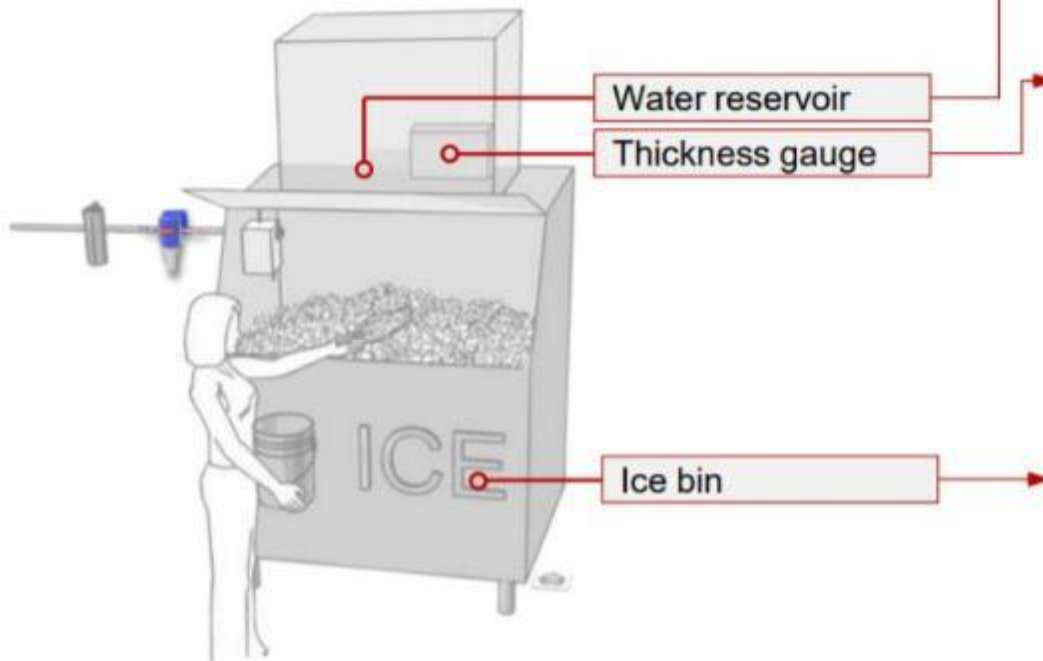
- EcO<sub>3</sub>Ice Antimicrobial device is **PROVEN** to:
  - Dramatically reduce the amount of bacteria, mold and yeast on icemaking and ice-storage surfaces.
  - Reduce the risk of ice contamination by microorganisms.
  - Inhibit formation of biofilm on ice contact surfaces.
  - In side-by-side machine testing, EcO<sub>3</sub>Ice kills 99.999% (5-log reduction) of E.coli after 48 hours.



# Enozo EcO<sub>3</sub>Ice- KILLS Microbes

Field test validation: bacteria & yeast

- Tested at a popular sandwich chain
- Swab samples taken every 2 weeks



# SANDWICH MAKING & BREAD BAKING CHAIN

Location: USA

Year: 2016

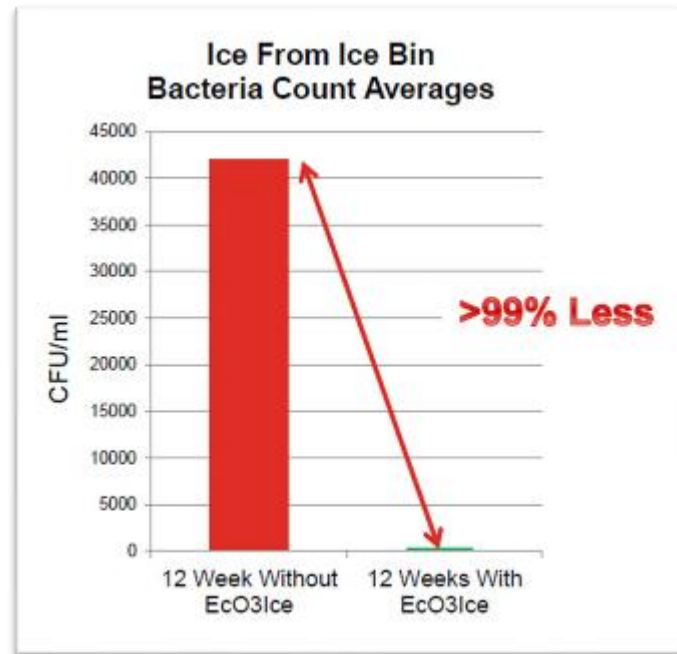
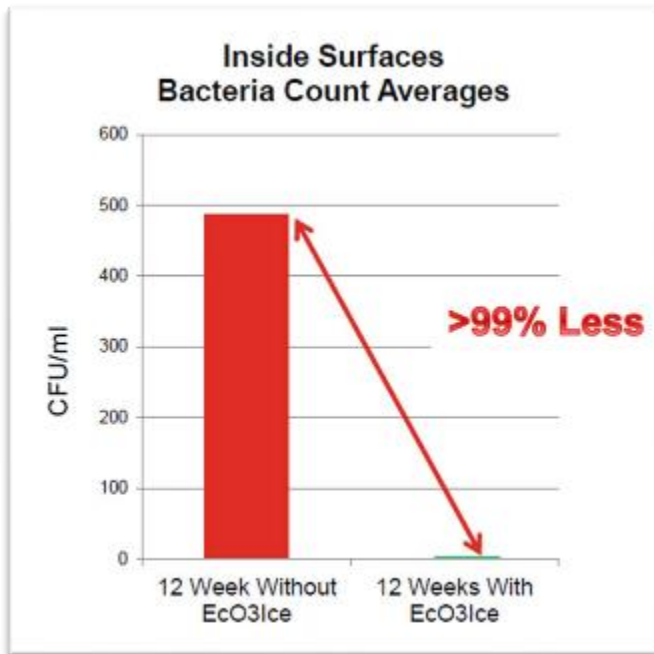
Test population: 1 restaurants

Length of test: 12 weeks without  $\text{EcO}_3\text{Ice}$  v/s 12 Weeks with  $\text{EcO}_3\text{Ice}$

Results inside Ice machine surfaces: up to 99.8% microbial reduction after 12 weeks

Results on Ice quality: up to 99.997% microbial reduction after 12 weeks

**Note: USEPA recommended minimum level for drinking water is 500 cfm/ml**



# CONVENIENCE STORE CHAIN – CUBE ICE

Location: Tennessee

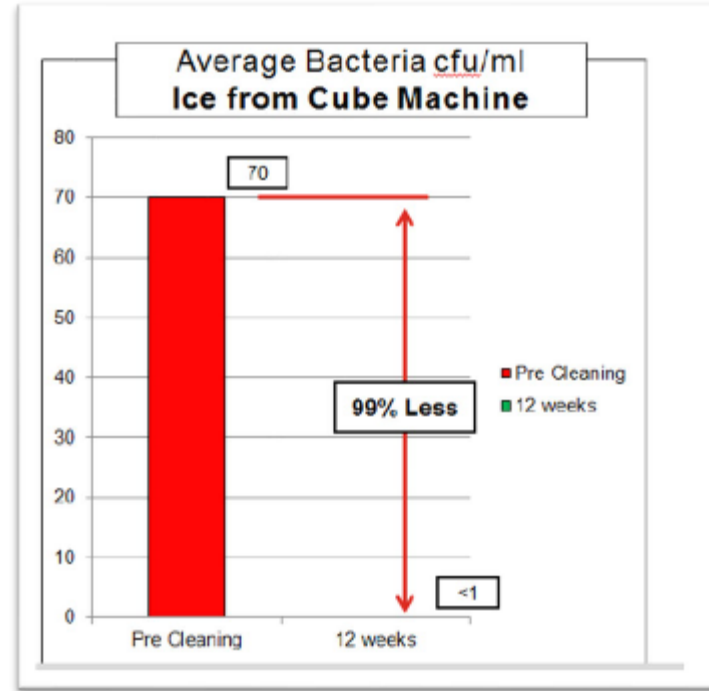
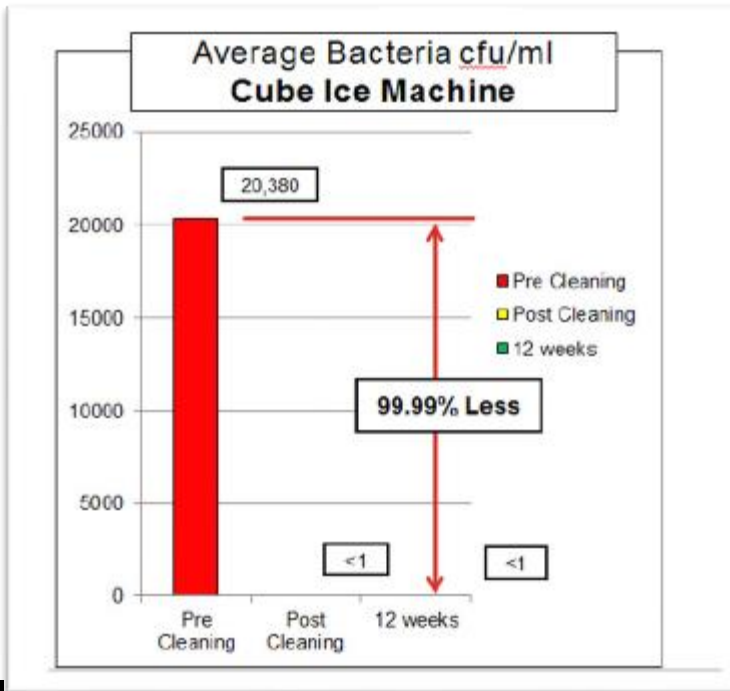
Year: 2017

Test population: 1 restaurants (with on site pizza bakery)

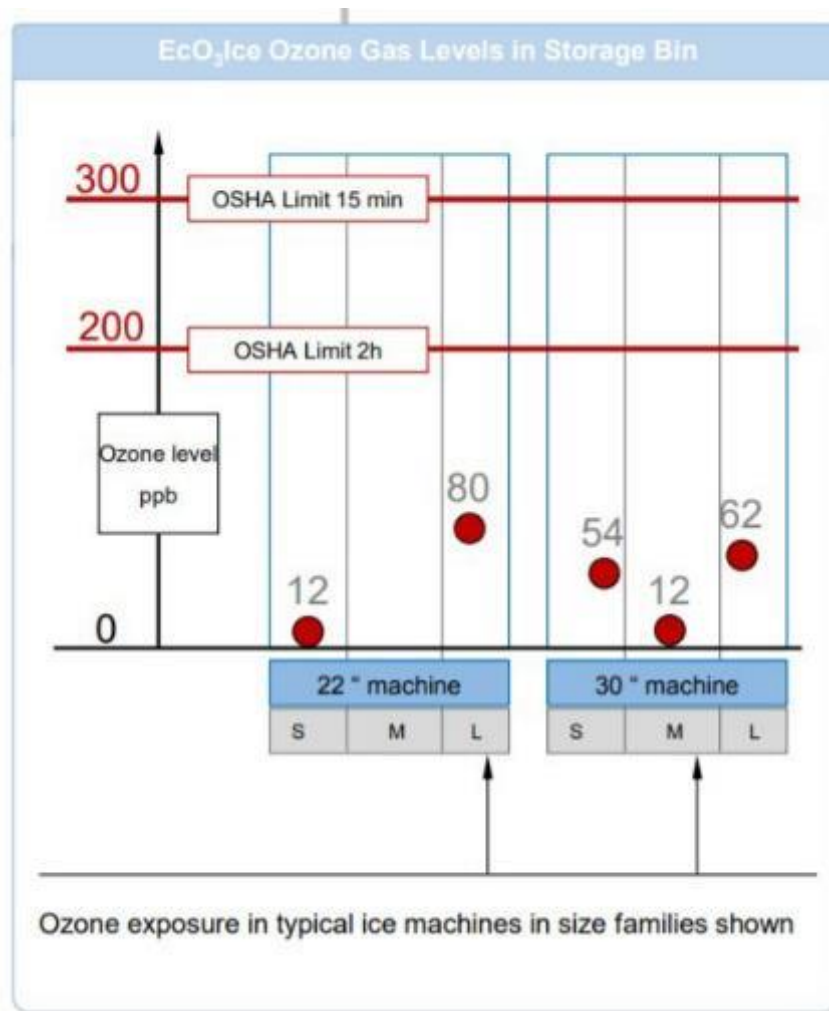
Machine: Cube Ice

Length of test: 12 weeks Results inside Ice machine surfaces: 99.99% microbial reduction after 12 weeks

Results on Ice quality: 99% microbial reduction after 12 weeks



# Enozo EcO<sub>3</sub>Ice- Is it Safe?



- Stated opinion of a third-party, government regulation expert:
- EcO<sub>3</sub>Ice-created ozone levels are “well below thresholds of concern for ozone in either professional or consumer use,” in all key areas:
  - 1. Ozone gas in storage bin
  - 2. Handling of ice
  - 3. Ozone gas near consumer
  - 4. Ingestion of ice

# Enozo EcO<sub>3</sub>Ice- Does it Harm Beverage?



- EcO<sub>3</sub>Ice destroys compounds which cause odor and can negatively affect the taste of water and ice
- Ozone is used to reduce contamination, taste and odors in drinking water worldwide
- EcO<sub>3</sub>Ice produces a cleaner, better ice cube with a positive effect on quality and consistency of beverages

You wouldn't serve bacteria in Food, why would you serve it in ice?

# Enozo EcO<sub>3</sub>Ice- Certifications & Approvals

- EcO<sub>3</sub>Ice has approvals for compatibility with the following brands of ice machines and the following certifications:



**RoHS**



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# Enozo EcO<sub>3</sub>Ice- Cartridge Life & Replacement

- Cartridge life depends on 2 factors:
  - 1. Volume of water flowing through (i.e., amount of ice being made)
  - 2. Quality of water (i.e., harder the water, shorter the life)
- “Your mileage may vary,” within expected range of 6 to 24 months
- Red LED light on head unit indicates when cartridge requires replacement
- For simplicity, Enozo recommends replacing the cartridge at same interval as the ice machine’s water filter cartridge



- Cartridge life-tested to 50K gallons at 17.5 grains hardness

# Enozo EcO<sub>3</sub>Ice - Requirements

- EcO<sub>3</sub>Ice installs in 15 minutes or less
- Integrated mounting plate
- Requires 110v outlet. EcO<sub>3</sub>Ice wall-wart plug can be applied to 100v or 208v power source.
- Enozo EcO<sub>3</sub>Ice plug comes with international outlet adaptors
- Must be installed “down stream” of any filtration device
- For best results, use standard carbon-type water filtration
- EcO<sub>3</sub>Ice is **ONLY** installed on new or recently deep cleaned/sanitized ice machines





# Thank you.

Contact us

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**Light House**

Project Management Consultancy