

ECO-CAT CLEAN™

ADVANCED BIO-CATALYTIC DEEP CLEANING & ODOR CONTROL OF FATS, OILS, GREASES, SOILS & HYDROCARBONS









Deep Cleaning & Odor Control

Eco-Cat Clean[™] transforms any commercial facility into an ultraclean and odor-free state, far surpassing any other cleaning product, or technology, available on the market today.

Eco-Cat CleanTM is completely non-toxic, extremely safe to use, and provides tremendous overall benefits and cost-saving strategies.



Product Profile

Eco-Cat CleanTM is one of a line of patented bio-organic catalytic (BOC) products that establishes a new standard in environmental management, where facilities are able to be ecologically transformed, resulting in long-term health and economic benefits.

Eco-Cat Clean[™] is based on the BOC technology platform that allows highly enhanced gas transfers, providing instantaneous odor elimination, and the ability to break down organic waste contaminants, such as fats, oils and greases, on a highly accelerated basis.

Eco-Cat Clean®

Product Profile

Eco-Cat Clean[™] brings a revolutionary technological breakthrough to the cleaning industry that takes green cleaning to the next level.

- •Universal green cleaner for sinks, counter tops, floors, drains, glass.
- •Non-toxic, biodegradable, non-irritating, non-caustic, non-corrosive.
- Removes fats, oils and greases.
- Odors neutralized on contact.
- Keeps drain lines clean and flowing.
- •Dissolves mineralization and slime buildup in tanks and lines.
- •Eliminates surface oil stains and restores parking lots, stadium concourses and streets.
- The most deeply embedded wastes are dissolved away naturally.

Eco-Cat Clean[™] Where does it work best?

Eco-Cat Clean[™] is built on a technology that has proven results in keeping pipes and drains free flowing and odor free, including:

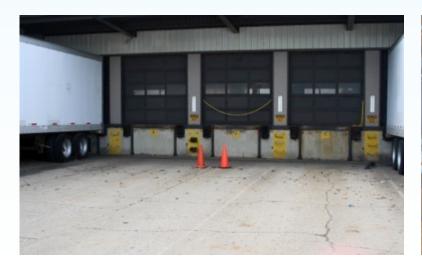
- Counter Tops
- Floors/Tile
- Kitchens
- Bathrooms
- Ovens
- Drain Lines
- Garbage
- Grease Interceptors
- BBQ Grills
- Loading Docks
- Parking Lots
- Stadium Concourses
- Animal Facilities



Where does it work best?

Restaurant floors and loading docks can be cleaned so deeply that their original colors return, while reducing slippage and chronic dingy appearances.

Eco-Cat CleanTM solves the most challenging environmental issues of the facility manager that have always eluded traditional cleaning products, while having none of the detrimental issues of toxic cleaners.





Eco-Cat CleanTM *Specifications*

DIRECTIONS FOR USE

•Glass Cleaner: 30 ml per 1 litre of water.

•Hand Sprayers: 60 ml per 1 litre of water.

Mop Buckets: 60 ml per 4 litres of water.

•Power Washers: 120 ml per 4 litres of water.

Drain Lines: 1 litre per day.

•Odor Control Systems: 4 litres per month.

•Foam Guns: 100 ml per 4 litres of water.

•Foggers: 120 ml per 4 litres of water.

Eco-Cat CleanTM *Specifications*

PRODUCT SPECIFICATIONS

Eco-Cat Clean[™] is non-toxic, non-caustic, and safe to handle with a recommended shelf life of two years. May be stored with confidence at temperatures below 125° F / 50° C.

CONTENTS

Water, highly purified bio-organic catalysts from plant and mineral sources, bio-surfactants. (< 5% non-ionic surfactants)

Eco-Cat CleanTM *Dispenser Applications*

Eco-Cat Clean[™] can be deployed through a wide variety of application devices and setups, including odor and drain pumps, spray systems, fogging machines, power washers, hand sprayers, and mop buckets.



Odor Control Installations

ODOR CONTROL IN NEW YORK CITY RESIDUAL WASTE FACILITY (COMBINATIONS OF GRIT SCREENING & FOG'S)



BOC AUTOMATIC ODOR CONTROL SYSTEM FOR GARBAGE TRUCKS TORONTO, CANADA



ODOR CONTROL FOR THE GRIT SCREENING CONVEYOR OPERATION MISSISSAUGA WWTP, CANADA



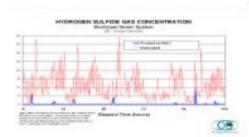
WASTE TRANSFER STATIONS TORONTO, CANADA



AUTOMATIC SPRAY MISTING SYSTEM INSIDE THE BACK OF A TRUCKS



ODOR CONTROL FOR COLLECTION SYSTEMS



BOC ODOR CONTROL USING MISTING SYSTEM



BOC ODOR CONTROL FOR 7 MILE DRAINAGE CANAL PORT AUTHORITY OF NEW YORK/NEW JERSEY



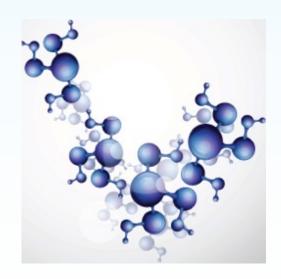
BOC WET WELL HYDROGEN SULFIDE ODOR CONTROL



Eco-Cat CleanTM BOC - Technological Breakthrough

The functional mechanism of BOCs is attributed to its ability to create 'ultra-fine' microbubbles, a true bio-organic catalyst (BOC). Eco-Cat CleanTM microbubbles consist of both a hydrophobic and hydrophilic element. These structured amphiphilic molecules are drawn to and will react, on contact, with various components involved in the cleaning of wastes.

- Molecular structures of wastes
- Organic waste remediation rates
- Oxygen transfer
- Oxidation of foul gases
- Residue byproducts of decaying Wastes (Sulfides, amines, mercaptans, skatole, & other contaminants)



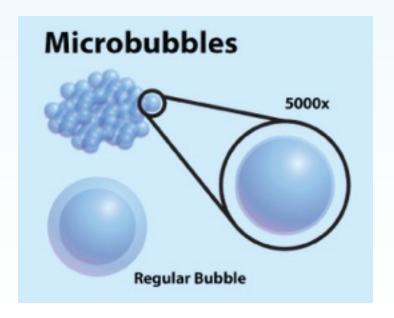
Eco-Cat CleanTM BOC - Technological Breakthrough

Eco-Cat CleanTM consists of a highly concentrated composition of micronutrients and surface modifying compounds that have extraordinary gas transfer characteristics. This allows for the neutralization of odorous gases on contact, the deepest cleaning of substrates and surfaces, and the elimination of scum buildups.



Eco-Cat CleanTM BOC - Technological Breakthrough

The BOC ultra-fine microbubbles have exponentially greater surface areas than normal soaps, detergents or cleaning products. The microbubbles exhibit a highly reactive effect on both liquid and solid wastes. The wastes are not only removed, they are bio-catalytically broken down into their constituent components.



Eco-Cat Clean™ BOC - Technological Breakthrough

Eco-Cat Clean[™] solubilization capability is part of a sequenced process in which lipid ester bonds are instantaneously cleaved, reducing their molecular structure to both glycerol and fatty acids.

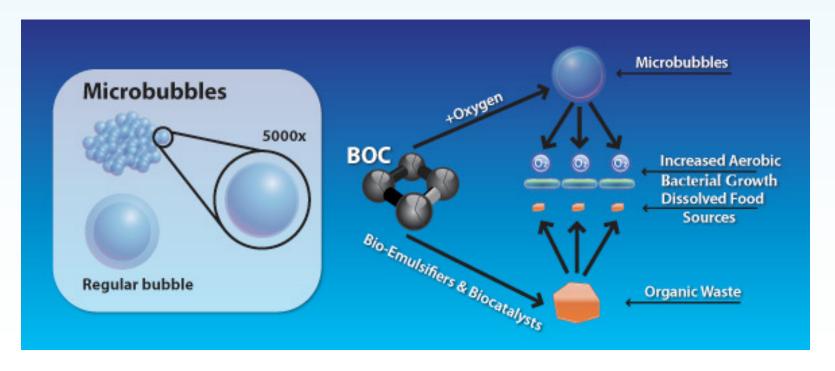
Glycerol is water soluble and readily degradable. Essential fatty acids, released from the lipids, can then be metabolized or washed away, unable to reform downstream. This is why surfaces and drains are deeply cleaned and eliminated of scum, grease blockages, biological film growth, or any residues.

Eliminating these waste and chemical cleaning agent residues produces a surface, and facility, that is much easier to maintain to long-term sanitized conditions and safety standards.

Eco-Cat Clean™

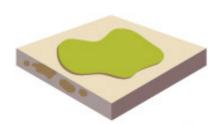
Cleaning Organic Wastes Bio-Catalytic Factors for Exceptional Deep Cleaning

- Initiates an immediate catalytic breakdown of wastes.
- •Eliminates the accumulation of biofilms and microscopic scum.
- •Maintains free-flowing drains and interceptors with no odors.

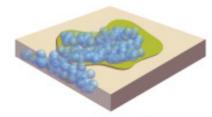


Eco-Cat CleanTM BOC -Technological Breakthrough

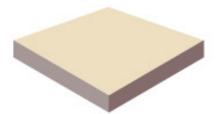
Microscopic View of Ultra-deep Cleaning of Substrates



A protective layer of slime builds up over the bacteria. The slime prevents oxygen from getting to the bacteria.



Eco-Cat Clean™ initiates an immediate catalytic breakdown of fats, oils, greases, soils and hydrocarbons.

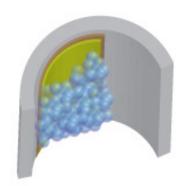


Surface counter, after it's been treated with Eco-Cat Clean™.

Eco-Cat CleanTM BOC - Technological Breakthrough Drain Line Cleaning



A protective layer of slime builds up over the bacteria. The slime prevents oxygen from getting to the bacteria.



Eco-Cat Clean™ initiates an immediate catalytic breakdown of fats, oils, greases, soils and hydrocarbons.

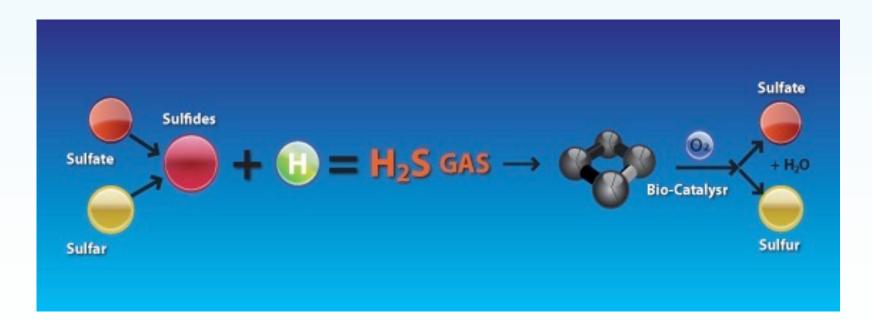


Drain, after it's been treated with Eco-Cat Clean™.

BOCs solubilize the cellular structure of organic waste, resulting in the ultimate cleaning and prevention of clogging, or biofilm growth, within pipes and drainage lines.

BOC - Technological Breakthrough Superior Odor Control

- Oxidizes noxious gases through oxygen transfer.
- •Establishes more aerobic conditions in waste collection.
- Instantaneous odor neutralization on contact.
- Deodorizes and cleans in one combined solution.



BOC - Technological Breakthrough Superior Odor Control

Odors are instantly neutralized on contact. The biofilms and residues, that cause odors, are removed for long-term odor control and optimal healthy conditions.



Odors emanating from a garbage dumpster.



Odor vapors are neutralized by oxygen transfer when treated with Eco-Cat Clean™.

The Next Generation in Green Cleaning & Deodorizing Chemistry – A Truly Universal Environmental Solution

- •Ultra-deep cleaning of floors and work areas reduces slippery conditions.
- Dangerous volatile gases and odors are immediately neutralized.
- •Fats, oils, and greases are easily removed, and then rapidly catalyzed, so as to not reform in drains.
- •Microscopic biological growth on surfaces, within containers and inside drain lines, are quickly dissolved providing extraordinary long-term cleanliness and lack of odor formation.
- •Deeper cleaning and removal of embedded organic waste components greatly enhances the use of sanitizing agents and reduces many of the long-term problematic concerns.
- •Can be deployed through numerous setups, such as foggers, foam guns, spray systems, and cleaning product dispensers.

Some Bio-Organic Catalyst Customers













Eco-Cat CleanTM BOC - Seal of Safety

The Bio-Organic Seal of Safety is our commitment to offering the highest bioaquatic safety on the market today.

BOC products have been extensively, independently tested and have been shown to be safe and non-toxic to water bodies and marine life, offering a new model for green chemistry that actually can improve the overall health of ecosystems.



PRODUCT OF USA Domestic and International Patent Protection

Bio-Organic Catalyst, Inc.

711 West 17th Street, #E6
Costa Mesa, California 92627
949.515.1301
bio-organic.com