

Hillyard Biological Solutions

- Cleaning
- Degreasing
- Deodorizing
- Drain Maintenance



Clean, Safe, Healthy Facilities - Lowest Total Cost



PUTTING THE POWER OF NATURE TO WORK

BREAKING DOWN BACTERIA AND ENZYMES

Natures Microscopic Cleaners

At Hillyard, we're looking to the power of nature for safe and reliable solutions. In doing so, we've found that naturally occurring, non-pathogenic bacteria can help provide effective, yet environmentally-responsible, alternatives that perform a variety of cleaning tasks. From common applications such as odor control in restrooms, to specialized procedures such as grease and drain trap maintenance, bacterial-based products are an ideal choice.

Terminology

Biotechnology: The science of selecting and utilizing living microorganisms for useful tasks.

Bacteria: Any of a group of diverse and numerous, single-celled organisms. Bacteria are either aerobic, anaerobic or facultative. Aerobic bacteria require oxygen to live and function. Anaerobic bacteria are capable of living in the absence of oxygen. Facultative bacteria function in either the presence or absence of oxygen.

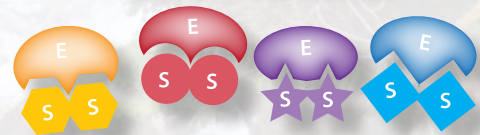
Spore: The dormant or inactive state of bacteria. Spores are very resilient due to their resistance to unfavorable environments like high heat, acidic/alkaline pH, chemicals, and low water content.

Vegetative State: The active or feeding state bacteria assume when exposed to a food source.

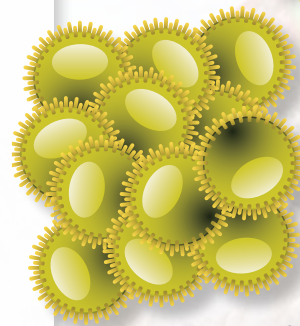
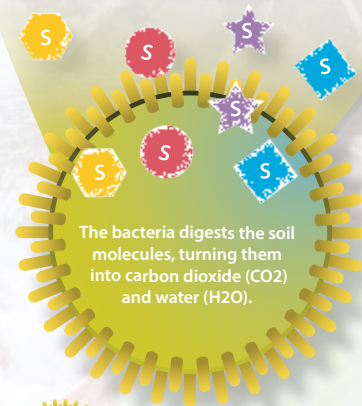
Enzyme: A protein produced by a bacteria that functions as a catalyst in the digestion or decomposition of organic waste. While bacteria metabolize a wide variety of organic material, the enzymes they produce are substrate specific.



Working like a lock and key, very specific enzymes lock on to very specific soil molecules.



The enzymes break down the soil molecules.



The Magic of Multiplication!

These awesome little cleaners multiply and can continue to digest soil and odors from surfaces for hours and days, as long as soil and moisture are present. The level of moisture can be as little as the humidity indoors (35-45%) in the air!

General Purpose



Liquid Enzyme II

A live, bacterial suspension that contains a minimum of 200 billion active bacteria per gallon that dissolve grease, fats, proteins, and carbohydrates. It is ideal for treating sink drains, wash basins, shower stalls, and refuse containers. Eliminates odors associated with pet urine. Neutralizes odors without leaving a heavy scented fragrance. Liquid Enzyme II can be safely used in a variety of applications including restrooms, floors, carpet, garbage containers, cigarette urns, and anywhere foul odors are a problem.

Item	Pack
HIL0047006	4 - 1 Gallon Containers
HIL0047007	1 - 5 Gallon Pail
HIL0101404	12 - 1 Quart Bottles

Formulated with an array of enzymes targeted to breakdown specific soils.

- Protease enzymes break down protein.
- Amylase enzymes break down carbohydrates.
- Lipase enzymes break down fat and grease.
- Urease enzymes break down urea.
- Xylanase enzymes break down plant-based materials.

Drain Maintenance

Fast Acting!



Liquid Trap Shooter®

The latest advance in bacterial-based products. It uses nature's own cleaning agents to rid grease traps and plumbing of grease and waste accumulation. Liquid Trap Shooter is able to begin working in as little as 30 minutes. Traditional bacterial products can take six to eight hours to begin working. With daily maintenance, Liquid Trap Shooter keeps grease traps free from excessive buildup while reducing odor, clogs, and expensive pump-outs.

Item	Pack
HIL0046906	4 - 1 Gallon Containers
HIL0046907	1 - 5 Gallon Pail
HIL0046909	1 - 55 Gallon Drum

Automate Dispensing with AutoDose



Utilize the flexible programming capabilities of the AutoDose to dose drains at the appropriate times. An easily-programmed timer turns the pump on and off to ensure the regular dosing of chemicals.

HDR1170 - Battery, 8 D-Cell
HDR1190 - AC Powered

Odor Control



Take Down®

Works naturally to destroy odors at their source. Unlike many products that simply mask odors, Take Down uses safe, natural bacteria and enzymes to eliminate stubborn odors. Plus there are no harsh chemicals to worry about. The bacteria simply die when their job is done and convert to carbon dioxide and water. Take Down can be safely used in a variety of applications including restrooms, floors, carpet, garbage containers, cigarette urns, and anywhere foul odors are a problem.

Available in 4 fragrances!



Size	Pack	Fresh Linen	Green Apple	Fresh & Clean	Cherry
Quart	12	HIL0046404	HIL0046704	HIL0046804	HIL0046604
Gallon	4	HIL0046406	HIL0046706	HIL0046806	HIL0046606
55 Gallon	1	HIL0046409	HIL0046709	HIL0046809	HIL0046609

Britenz-It™ with Floorbiotics technology

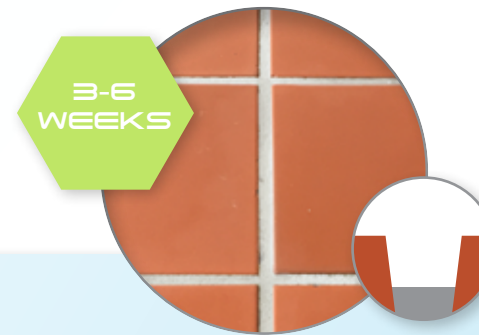
Tackle greasy floors with an **everyday, no-rinse** floor cleaner fortified with **grease-eliminating enzymes**.



Grease builds up in grout lines. Shoes spread the grease across the floor, creating a dangerous slip/fall environment.



After 1-3 weeks, with daily application much of the grease has been removed from the grout lines.



After 3-6 weeks, with daily application. Ongoing use will continue to consume and remove grease as it is deposited on the floor.

Nonstop Continuous Cleaning Action

The biotechnology in Britenz-It keeps the good bacteria producing billions of grease-busting enzymes around the clock 24/7. As long as there is a food source (grease) and moisture in the air, Britenz-It will be at work consuming grease and making future cleaning easier!



Item	Pack
HIL0014506	4 - 1 Gallon Containers
HIL0014547	2 - 2.5 Gallon Containers



Save Energy

Cold water application saves energy from not having to use hot water.



Conserve Water

No-rinse can save thousands of gallons per year.

pH Drop Confirms Enzyme Performance



Enzymes breakdown grease molecules into fatty acids. Over time, if the enzymes are doing their job breaking down the grease, the pH level will drop. Testing with Britenz-It shows a significant yet safe drop in pH, confirming performance.

In turn, the good bacteria feed on the fatty acids broken down by the enzymes and turn the fatty acids back into carbon dioxide and water.

Emulsifies and Removes Grease More Effectively

Laboratory experiment shows how Britenz-It effectively breaks down grease when compared to water and a typical floor cleaner. The cloudy appearance of Britenz-It indicates the fat was emulsified.



Grease is not broken down!

Grease/fat added to solution, stirred for 4 hours. White objects on the bottom are the magnetic stirring mechanisms.

Cost Effective, Accurate Dilution Control

Use the wall-mount Britenz-It Dilution Control Dispenser with the 2.5 gallon sealed container to ensure accurate, cost-effective in-use cleaning solution. Dispense at 4 gpm to quickly fill buckets.

Dispensing Kit: 1 Dispenser, Tubing, Supply Hose, Rack for 2.5 gallon container.
Kit No: HIL22302
Dispenser Only: HIL22301



Simple Application

1. SWEEP
2. APPLY
3. BRUSH
4. SQUEEGEE





The Cleaning Resource®

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