

# BI-CHEM® Porta-Treat Concentrate



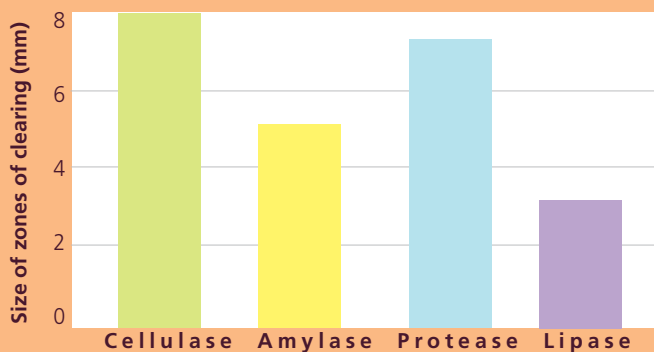
BI-CHEM® Porta-Treat Concentrate is a multiple spore blend formulation specifically designed for use in portable toilets, recreational vehicle (RV) and marine holding tanks to accelerate the biodegradation of organic waste while reducing odor. In their natural environment, bacteria produce hundreds of enzymes in response to the organics present in their environment. They produce extracellular enzymes that break down proteins, starches, fats, oils, greases and toilet tissue into smaller particles outside the bacterial cell. The bacteria then transport the smaller particles across their cell membrane for use as an energy source and for building of

BI-CHEM Porta-Treat maintains effective activity in toilets and holding tanks by degrading organic wastes

new cellular components. Since bacteria detect the organics present as potential food and produce specific enzymes to breakdown these organics, it is a very efficient system.

Septic systems, holding tanks and other waste systems are nutrient rich systems for bacteria. Although many bacteria can utilize these organics as food sources, it is the bacteria with the most rapid production of these key enzymes that provide the most dramatic effects. BI-CHEM Porta-Treat Concentrate utilizes the capabilities of the microbial consortium to produce key extracellular enzymes including amylase, cellulase, lipase and protease for fast and effective degradation of organics.

Enzyme Profiles of BI-CHEM Porta-Treat



A given quantity of microbial culture is spotted onto a disk that is placed on a Petri plate containing a solid media (substrate) that allows visualization of an enzyme reaction. As the targeted enzyme is produced and diffuses throughout the media, a "zone of clearing" is created where the substrate is broken down by the enzyme. The zones of clearing are measured from the edge of a microbial colony outwards to the edge of the zone of clearing. The BI-CHEM Porta-Treat consortium demonstrates excellent amylase, cellulase, lipase and protease enzyme production.

## Benefits

- Provides long-term odor control by removing the organics that cause odors and preventing the return of odor-causing compounds.
- Powerful, easy-to-use concentrate for rapid waste degradation and immediate odor control.
- Safe, natural replacement for formaldehyde and quaternary compounds.

## Features

- A stable consortium of safe *Bacillus* spores.
- Production of multiple enzymes providing a wide range of degradation capabilities.
- A synergistic blend that works to provide superior performance in treatment and maintenance of portable toilets, RV and marine holding tanks and odor control applications.
- Excretion of high levels of amylase, cellulase, lipase and protease enzymes.
- Ability to work under aerobic and anaerobic conditions.
- A proprietary inhibitory system that provides excellent product stability and acts as an essential growth stimulant to promote germination and outgrowth of the microbial blend upon addition to a waste system.



## Safety of BI-CHEM Porta-Treat Consortium

BI-CHEM Porta-Treat Concentrate contains a blend of safe *Bacillus* microorganisms. Toxicity studies done by an independent laboratory revealed that the BI-CHEM Porta-Treat consortium has no acute oral toxicity, no acute dermal toxicity, and no acute inhalation toxicity at maximal test dose. Acute dermal irritation and acute eye irritation studies classify the BI-CHEM Porta-Treat consortium as non-irritating. The consortium does not elicit a skin sensitization reaction.

## Product Characteristics

Bacteria Counts	8.1 x 10 <sup>7</sup> cfu/ml (300 Billion/gal)
Bacteria Type	Blend of <i>Bacillus</i> Spores
Salmonella	Not detected
Appearance	Blue
Fragrance	Cherry
Shelf-life	Two years; maximum loss of 1.0 log at recommended storage conditions

## Performance Characteristics

Enzyme Production	Lipase, Protease, Amylase, Cellulase
Bacterial Pathways	Aerobic & Facultative Anaerobic
pH Range	5.0 - 9.8
Temperature range	38° - 145°F (3° - 63°C)

## Storage and Handling

Store in closed containers at 50° - 100°F (10° - 40°C). Wash hands thoroughly with warm, soapy water after contact. Avoid eye contact.

## Standard Packaging

- 5 gallon pail
- 55 gallon drum

## Recommended Application Feed Rate

Add 4 - 6 ounces of BI-CHEM Porta-Treat to every 5 gallons of water in portable toilets, RV or marine holding tanks.

## Product Code: 7002368

This product not approved for use in Canada.



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