



# BioSON

- ✓ **Multi-Purpose**
- ✓ **Enzymatic**
- ✓ **Universal Detergent**



## MULTI-PURPOSE ENZYMATIC DETERGENT

BioSON is an ultra-concentrated universal device detergent. Designed to enhance the cavitation of cleaning bubbles when used in ultrasonic baths. This unique formula contains four enzymes that rapidly break down bioburden. It contains antimicrobial additives to reduce the odours and bacterial aerosols created by the bath. It can also be a very effective instrument pre-soak and multi-purpose detergent. Pleasant citrus scent.



DIN 02208709

## BACTERICIDAL & FUNGICIDAL

### FASTER



#### **Multi-Purpose**

Mixes instantly for use in ultrasonic and washing machines, also for floors and carpets. Concentrated formula for easy storage.



#### **Efficiency**

Replaces other specific ultrasonic cleaners like tartar and stain remover. Quicker, effective detergent.



#### **Universal Detergent**

Effective against STAPH, Pseudomonas aeruginosa, Salmonella choleraesuis & more

### SAFER



#### **Non-Toxic**

Contains no quats, phenols or aldehydes. Does not contain recently noted hormone disrupting surfactants based on Nonyl-phenyl Ethoxylates.



#### **Non-Corrosive**

Will not corrode metals, even when carbide, stainless or aluminum instruments are mixed



#### **Enzymatic Formula**

4-enzyme formula (Lipase, Protease, Catalase & Amylase) destroys harmful debris ensuring proper cleaning

### KINDER



#### **Chelating Agent**

BioSON's chelation technology, works to separate the debris helping to prolong the effectiveness and useful life of the solution



#### **Environmentally Friendly**

Contains natural source biodegradable surfactants and complies with all sewer regulations



#### **Eco-Friendly Disposal**

Leftover solution can be used in drains or plaster sinks to reduce microbes and unpleasant odours



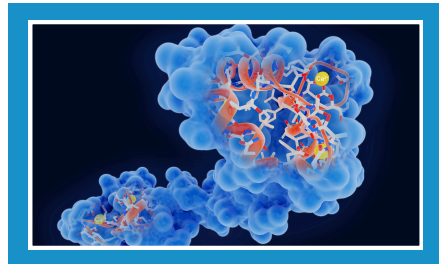
# ENZYMATIC MULTI-PURPOSE DETERGENT

## MULTI-PURPOSE



BioSON is recommended for all Ultrasonic cleaning applications as well as for general detergency and Enzymatic cleaning. Other applications include laundry, carpet and floor cleaning.

## ENZYMATIC ACTION



BioSON 4 Enzyme based formula contains Lipase designed to destroy lipids or oils. The Protease is for removing proteins, the Catalase is for cellulose and Amylase is for starches or carbohydrates.

## THE CONCEPT



Our goal is to provide solutions, not just to kill or inactivate, but to clean, protect and minimize the impact of regular sustained usage (people, equipment, professional and natural environments). BioSON contains biodegradable surfactants, biological enzymes and naturally derived scents.

## HOW TO USE

**BEGIN BY CAREFULLY DISPENSING BIOSON™ FROM THE ECOPACK™ SPIGOT DIRECTLY INTO A MEASURING CUP.**

1



Dilution Ratio: 1:40  
Add 25mL of BioSON™ to up to 1.0L of warm water in the ultrasonic bath. Set timer for 10 minutes.

2



Dilution Ratio: 1:80  
Add 12mL for every 1L of water into Carpet Steam cleaners to freshen carpets

3



Dilution Ratio: 1:100  
10mL for every 1L of water for washing floors and walls.

4



Dilution Ratios: 1:200  
**Small load** 125 mL (1/2 cup)  
**Medium load** 250 mL (1 cup)  
**Large load** 500 mL (2 cups)  
Compatible with HE (High Efficiency) washing machines.

5



Soak the items below for 30 minutes prior to washing.  
Dilution Ratios:  
Clothing  
25mL for every 1L of water.  
Heavily Soiled Items  
50mL for every 1L of water.

6



When to change solution;  
Once solution becomes cloudy or every 5 days

## PRODUCT SPECIFICATION DATA

Item Number	Product Description	Packaging
02-SON2-001	BioSON 1L Bag-in-Box	1 Box
02-SON2-005	BioSON 5L Bag-in-Box	1 Box

## CUSTOMER REVIEWS

“We use BioSON in our office as an ultrasonic solution. We love its multi-purpose function. Pre-soaking blood stained scrubs with BioTEXT and then washing with BioSON always results in our clothes coming out clean and smelling fresh. BioSON is our go-to detergent for all areas of our office.”

Rob P., Pet Plus Veterinary Clinic, Toronto, Ontario



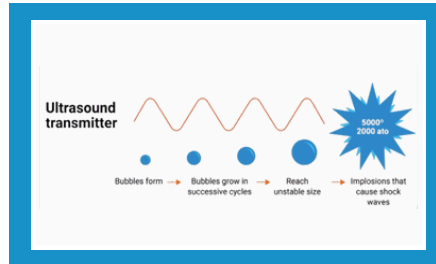


## ULTRASONIC



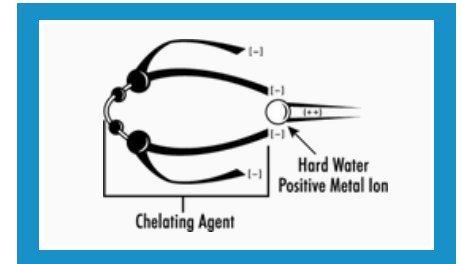
Ultrasonic cleaning works through high-frequency sound waves transmitted through liquid to scrub clean the surface of immersed items. The high-frequency sound waves (40 kHz) agitate the liquid solution of BioSON and cause the cavitation of solution molecules.

## CAVITATION



Cavitation in ultrasonic units is the formation and collapse of tiny bubbles in a liquid due to alternating high and low-pressure cycles from high-frequency sound waves. This acoustic cavitation process creates powerful micro-jets and shockwaves as the microscopic bubbles implode, which effectively dislodge contaminants from the surfaces of objects submerged in the liquid.

## CHELATING AGENTS



Chelation is a process where a chelating agent in BioSON binds itself to the metal atoms on the instruments being cleaned. It then pulls the foreign matter to the bottom of the container making it easier to dispose of and lengthening the life of the Ultrasonic solution. Competing brands that do not use a chelating agent catalyst require their solutions to be changed more often.

## EFFECTIVE CONTACT TIME

Pathogen Type	Strain	Effective Contact Time
Bacteria	Salmonella choleraesuis (ATCC 10708)	10 minutes
Bacteria	Pseudomonas aeruginosa (ATCC 15442)	10 minutes
Bacteria	Staphylococcus aureus (ATCC 6538)	10 minutes
Bacteria	Escherichia coli (NCTC 10541) (10% soil)	10 minutes
Fungi	Trichophyton mentagrophytes (ATCC 9533)	10 minutes
Fungi	Trichophyton menghini (ATCC 12106) (10% soil)	10 minutes

Note: Initial Formulation Batch (aged 60 days) tested on 60 replicates as indicated in AOAC method 955.15 for confidence level of 95%.  
Each Production Batch is tested with 10 replicates (0% failure) to monitor ongoing quality control specifications for each product.  
\* Testing performed at Nucro-Technics Laboratory, 2000 Ellesmere Road, Unit 16 Scarborough, Ontario  
All other tests performed at Micrylium Laboratories, 117 Dolomite Drive, North York, Ontario



Contact your Authorized Dealer to order.

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