



CIDEZYME BIOCLEAN™

EFFECTIVE ON ALL SOILS, INCLUDING WHAT YOU CAN'T SEE

Enzymatic detergent for manual cleaning of flexible endoscopes, designed to physically remove biofilm from flexible endoscope lumens

The Critical Role of Manual Cleaning

Manual cleaning is the most critical step in medical device reprocessing, determining the effectiveness of all subsequent steps and ultimately impacting patient safety.

Yet, not all contamination is visible. Even when an endoscope appears clean, residues may remain - particularly inside complex channels where mechanical access is limited.

One of the most challenging forms of contamination is biofilm: a structured layer of microorganisms that can be significantly more resistant than other types of soil, cannot be detected visually, and cannot be removed by disinfection alone once established.

While many detergents reference biofilm removal, the conditions required to achieve it are not always clearly defined or supported by evidence.

When used as per IFU, CIDEZYME BIOCLEAN™ physically removes biofilm during manual cleaning and improves the margin of safety before high-level disinfection or sterilization.



BIOFILM REMOVAL IN 3 STEPS:

1. Soak (3 min contact time, 8 ml/L at 30°C) – organic soil removal
2. Flush (5 min contact time, @ 30°C, ≥1000 mL/min) – biofilm removal
3. Brush & Rinse

What Makes CIDEZYME BIOCLEAN™ Different



Evidence-Based Performance

Delivers reliable cleaning performance under defined conditions.

- Physical removal of biofilm meeting the ISO 15883-5 acceptance criteria for cleaning
- Performance validated across multiple standardized and comparative test methods
- Demonstrated effective removal of organic soil and biofilm under controlled conditions



Advanced Formulation

Drives cleaning efficacy with a formulation designed for real-world challenges.

- Unique formulation supporting biofilm disruption
- Low-foaming for optimal usability and residue removal



Defined Cleaning Process

Provides a structured and reproducible approach to manual cleaning.

- Clearly defined instructions for use (IFU) with specified parameters
- Controlled conditions including contact time, temperature, and flushing
- Supports consistent cleaning outcomes across users and facilities



Material Compatibility & Environmental Profile

Balances cleaning performance with material safety and environmental responsibility.

- Mild pH formulation to support compatibility with sensitive endoscope materials
- Readily biodegradable formulation (OECD 301F)

Proven Performance Under Standardized Conditions

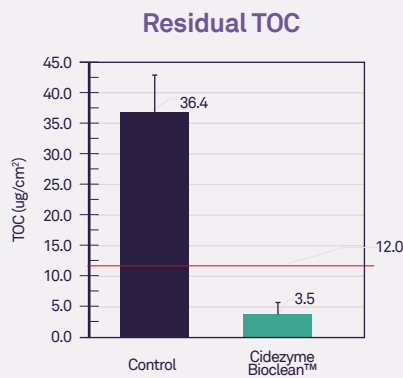
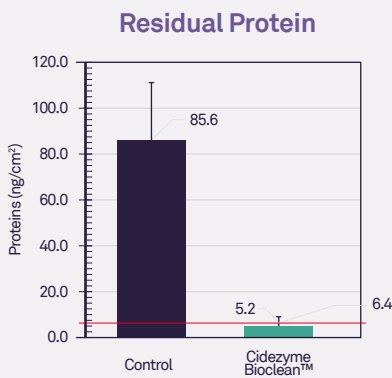
CIDEZYME BIOCLEAN™ has been evaluated using standardized and comparative test methods to show effective cleaning performance, including biofilm removal.



Aligned Cleaning Performance with ISO 15883-5:2021 cleaning criteria

Biofilm removal capability confirmed under defined test conditions:

- Residual protein $\leq 6.4 \mu\text{g}/\text{cm}^2$
- Total Organic Carbon (TOC) $\leq 12.0 \mu\text{g}/\text{cm}^2$



Soil Removal Performance (Comparative Testing)

- Evaluated using TOSI® test soil model and gelatin removal test
- Showed superior removal of dried organic soil test compared to multiple enzymatic detergents



Material Compatibility & Safety

- Tested on common endoscope materials (metals and polymers)
- Superior material compatibility even after extended exposure (~48h / multiple cycles)
- Better corrosion inhibition activity compared to other leading detergent



Environmental Profile

- Readily biodegradable (OECD 301F)
- Achieved >60% biodegradation within 28 days
- Met criteria within 20 days

Together, these results serve to show a well-balanced formulation combining cleaning efficacy, material safety, and environmental responsibility.



Support Effective Cleaning Where It Matters Most

Biofilm removal depends on defined cleaning conditions - not visual inspection alone.

There is growing focus across the healthcare ecosystem, including medical device manufacturers, on addressing biofilm as a critical factor in endoscope reprocessing.

A structured, evidence-based manual cleaning process supports consistent outcomes and enhances the overall effectiveness of reprocessing.

Because what cannot be seen can still impact patient safety.



Product Name	Product Number	Packaging
CIDEZYME BIOCLEAN™ - 1 gallon bottle (3.78L)	88301	Case: 4x1 gallon bottle + 1 Pump