INFECTION PREVENTION TOOLKIT

MICRO-SCIENTIFIC®

ABOUT MICRO-SCIENTIFIC

At Micro-Scientific, we aim to help our customers and end-users maintain the health and safety of their patients, employees and clients. Since 1975, we have manufactured and marketed products used for the prevention of microbial transmission and cross-contamination.

We prioritize innovation, through ongoing research and development programs, utilizing guidance from microbiologists, immunologists, infection control specialists, chemists and other experts in various disciplines. We follow strict ISO 9001 and ISO 13485 quality controlled manufacturing guidelines, and are a US-based business, with our facility located in Gurnee, Illinois.

We are in close contact with governmental regulatory agencies such as the U.S. Centers for Disease Control (CDC), U.S. Environmental Protection Agency (EPA), U.S. Food and Drug Administration (FDA), Health Canada (HC), Occupational Safety and Health Administration (OSHA) and U.S. Department of Transportation (USDOT) to ensure that our products meet the most recent guidelines and regulations.

OUR PRODUCTS

Micro-Scientific manufactures surface and high-level disinfectants, detergents for processing surgical instruments, antimicrobial soaps, and optical blade cleaning kits.

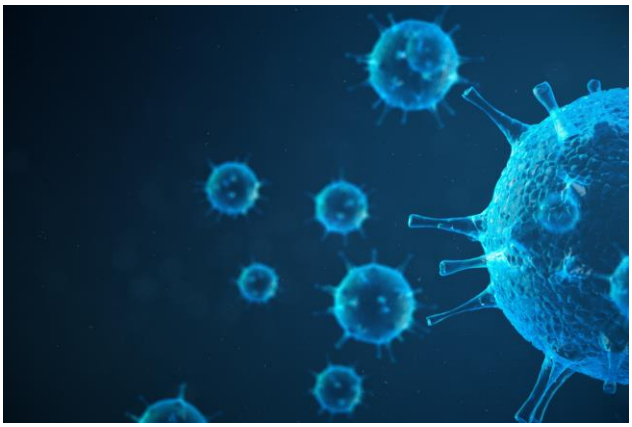
Our most advanced disinfectant is Opti-Cide MAX, a hospital grade surface disinfectant that delivers excellent cleaning, broad spectrum disinfection, 1-minute effectiveness against bacteria, viruses – including SARS-CoV-2 – and fungi, and 2-minute effectiveness against TB. Opti-Cide MAX is made from a low alcohol formula that is compatible with all surfaces common to healthcare facilities. It is available as a bulk liquid, spray bottle and in 2 sizes of wipes.

OUR COMPANY

Micro-Scientific is a part of PurposeBuilt Brands, a portfolio of leading consumer and commercial brands whose products are built to tackle tough challenges on specialty surfaces and applications. In addition to Micro-Scientific, the PurposeBuilt Brands portfolio includes Weiman, Goo Gone, Green Gobbler, Biokleen, 30 Seconds, Magic, Gonzo, Stone Care International, Wright's Urnex and Five Star Chemicals. You can find these products in a broad range of retailers, in millions of bathrooms and kitchens, and in use across a wide range of businesses; from your favorite coffee shop to breweries nationwide.

DEFEAT HAI'S

Healthcare Associated Infections (HAI) are a significant cause of death in the US. They lead to millions of incremental hospital patient days annually and are a costly burden to healthcare facilities and patients. Micro-Scientific is dedicated to developing a portfolio of cleaning and disinfecting products that can help reduce HAI.



OPTI-CIDE MAX & OPTI-CIDE^3 SURFACE DISINFECTANTS

Opti-Cide MAX and Opti-Cide^3 are EPA registered, ready-to-use, surface disinfectants for use in hospital patient care rooms, OR, ER, ambulatory surgical centers, neonatal & infant care units, child care facilities, plasma pheresis and blood centers, respiratory therapy and pulmonary labs, dialysis facilities and the many other areas where the strict control of cross-contamination is critical.

Because surfaces that are not clean cannot be disinfected, we have developed both Opti-Cide MAX and Opti-Cide^3 to also have superior cleaning capabilities. They effectively and quickly loosen and suspend blood and bodily fluids, non-organic and organic soil.

Opti-Cide MAX kills the dangerous ESKAPE and ESKAPE MDRO organisms in 1 minute. ESKAPE bacteria are responsible for approximately 2/3 of all Hospital Acquired infections (HAI). It is on the EPA's List N, with a 1-minute kill time for SARS-CoV-2 (the cause of COVID-19), on hard, non-porous surfaces.

Opti-Cide^3 effectively sanitizes soft surfaces surfaces with a 10-second contact time. It can be diluted into ordinary tap water to clean environmental surfaces such as floors and walls. It is also on the EPA's List N, with a 2-minute kill time for SARS-CoV-2 (COVID 19 virus), on hard, non-porous surfaces.

Opti-Cide MAX and Opti-Cide^3 are available in both wipes and spray bottles. The wipes have a powerful scrubbing ability to quickly and effectively clean surfaces, while still being safe on surfaces. Opti-Cide MAX and Opti-Cide^3 spray bottles are fitted with a specially designed foaming spray head that allows application with large foam droplets without producing airborne (mist) particles that can be aspirated. The bubbling foam allows for penetration into corners, cracks and crevices where soil and organic debris are immediately lifted off surfaces and suspended for easy removal.

Opti-Cide MAX and Opti-Cide^3 products are US EPA registered, approved and registered in all 50 states, meet CDC & CMS guidelines for health care facility disinfectants, exceed OSHA blood-borne pathogen requirements and are produced following strict FDA Good Manufacturing Practices.

THE IMPORTANCE OF SURFACE COMPATIBILITY

Surface compatibility is much more important than one might realize. It is not just that a disinfectant may make something look old or unkempt. If the disinfectant starts to corrode a surface like a stainless steel counter, handrail, IV pole, medical device or instrument, initially the damage is often not visible. However, any damage invites bacteria to enter even the slightly pitted or damaged areas, find shelter, and initiate biofilm formation[1]. For example, this type of damage can occur when using strong acids, ammonia, or hypochlorite-based disinfectants (bleach) on items composed of stainless steel. The corrosive damage increases with repeated use of an inappropriate disinfectant expanding the area affected and the depth of the corrosion providing more shelters to serve as pathogen reservoirs.

There are additional concerns. If the stainless steel item is thin, corrosion will weaken the metal. If it has a sharp blade, the edge will be dulled and microscopically jagged. Not only will the instrument function sub-optimally, but the chemical reactions on the now oxygen-exposed sub-surfaces with mounting rust particles could injure the patient.

LCD touch screens can easily be ruined by incompatible chemicals. It is best to check with the manufacturer as mistakes can be costly. It is important when using a compatible cleaner or disinfectant on any monitor or television screen that you do not spray directly on to the screen as the droplets could penetrate poor seals and short the circuitry, or drip down and seep into the space between the screen and the protective cover.

SURFACE COMPATIBILITY COMPARISON

While other bleach-based and high alcohol disinfectants can damage surfaces, Opti-Cide MAX is broadly compatible with common surfaces used in healthcare facilities.

[1]Source: Vickery K, Deva A, Jacombs A, et al. Presence of biofilm containing viable multiresistant organisms despite terminal cleaning on clinical surfaces in an intensive care unit. J Hosp Infect 2012;80:52- 55.

OPTI-CIDE MAX®

Disinfectant Cleaner

Opti-Cide MAX cleans and disinfects hard, non-porous surfaces such as acrylic, metals (aluminum, brass, copper, stainless steel, chrome), glass, plastics (polycarbonate, polypropylene, polystyrene and polyvinylchloride (PVC)), Plexiglas®, and vinyl. Opti-Cide MAX kills hard-to-kill ESKAPE and ESKAPE MDRO organisms with a 1 minute♦ kill time.

Opti-Cide MAX is on the **EPA's List N** and has a 1 minute kill time for SARS-CoV-2 (the cause of COVID-19) on hard, non-porous surfaces.

FEATURES & BENEFITS

- **1 Minute♦ Kill Time.** Kills tested organisms in 30 seconds to 1 minute. Faster kill times mean faster turnovers.
- **Broad Spectrum.** A true broad spectrum disinfectant that is Bactericidal, Fungicidal, Virucidal, and Tuberculocidal.
- **Surface Safe.** Safe on clinical surfaces such as acrylic, aluminum, brass, copper, stainless steel, chrome, plastics and more. Maintain clear, bright plastics that are typically clouded by high levels of alcohol.
- **Low Alcohol Formula.** Cleans better than high alcohol formulas (55%). Low alcohol formula (20%) won't affix blood and soil to surfaces.
- **Kills ESKAPE and ESKAPE MDRO.** Kills dangerous ESKAPE and ESKAPE MDRO organisms in 1 minute. ESKAPE bacteria are responsible for approximately 2/3 of all hospital acquired infections.

♦ Kills TB in 2 minutes

ORDER INFORMATION

M60034 • 160 Wipes (6 x 6.75 in)

M60035 • 1 Gallon (3.7 L) Liquid

M60036 • 24 oz (710) Spray

M60038 • 65 XL Wipes (9 x 12 in)

OPTI-CIDE MAX®

30 SECOND KILL TIME

VIRUCIDAL

Enveloped Viruses

Hepatitis B Virus (HBV)
Hepatitis C Virus (HCV)
Human Immunodeficiency Virus (HIV-1)

1 MINUTE KILL TIME

VIRUCIDAL

Enveloped Viruses

Herpes Simplex Virus Type 1 (ATCC VR-733)
Herpes Simplex Virus Type 2 (ATCC VR-734)
Human Coronavirus (ATCC VR-740)
SARS-CoV-2 (COVID-19)
Influenza A Virus (H1N1)
Influenza A Virus (H3N2)

Non-Enveloped Viruses

Norovirus (ATCC VR-782)
Rotavirus (ATCC VR-2018)

FUNGICIDAL

Fungi

Trichophyton interdigitale (ringworm) (ATCC 9533)

BACTERICIDAL

Gram-Negative Bacteria

Acinetobacter baumannii (ATCC 19606)
Bordetella pertussis (ATCC BAA-589)
Carbapenem Resistant Escherichia coli (ATCC BAA-2471)
Carbapenem Resistant Klebsiella pneumoniae (ATCC BAA-2470)
Enterobacter aerogenes (ATCC 13048)
Enterobacter cloacae (ATCC BAA-2341)
Extended-Spectrum β-lactamase Escherichia coli (ESBL) (ATCC BAA-196)
Klebsiella pneumoniae (ATCC 4352)
Multi-Drug Resistant (MDR) Acinetobacter baumannii (ATCC BAA-1605)
Pseudomonas aeruginosa (ATCC 15442)
Pseudomonas aeruginosa (ATCC BAA-2108)
Salmonella enterica (ATCC 10708)

Gram-Positive Bacteria

Enterococcus faecium (ATCC 51559)
Methicillin-Resistant Staphylococcus epidermidis (MRSE) (ATCC 51625)
Methicillin-Resistant Staphylococcus aureus (MRSA) (ATCC 33592)
Staphylococcus aureus (ATCC 6538)
Staphylococcus aureus Rosenbach (ATCC 14154)
Vancomycin Intermediate Staphylococcus aureus (VISA) (ATCC 700699)
Vancomycin-Resistant Enterococcus faecalis (VRE) (ATCC 51299)

2 MINUTE KILL TIME

TUBERCULOCIDAL

Mycobacteria

Mycobacterium bovis BCG (tuberculosis)

OPTI-CIDE³

Hard, Non-Porous Surface Sanitizer Disinfectant Cleaner

Use this product to clean, disinfect and sanitize hard, non-porous non-food contact, inanimate surfaces such as those made of acrylic, metals (aluminum, brass, stainless steel, chrome), glass, plastics (polycarbonate, polypropylene, polystyrene and polyvinylchloride), clear plastics, Plexiglas®, vinyl as well as laminated and painted surfaces. Opti-Cide³ effectively and quickly loosens and suspends blood and bodily fluids, non-organic and organic soil, and other cellular debris for easy removal.

Opti-Cide MAX is on the **EPA's List N** and has a 2 minute kill time for SARS-CoV-2 (COVID-19 virus) on hard, non-porous surfaces.

FEATURES & BENEFITS

- 2-Minute hard, non-porous surface disinfectant.
- 10-Second soft surface sanitizer (Solution only).
- Bactericidal, Fungicidal, Virucidal, Tuberculocidal.
- Ready-to-Use.

ORDER INFORMATION

NEMSI24SA • 24 fl oz (710 mL) Spray	NEMSI15 • 15 Gallon (57 L)
NEMSI24 • 24 fl oz (710 mL) Pour	NEMSI15 • 30 Gallon (114 L)
NEMSI1 • 1 Gallon (3.8 L)	NEMSI55 • 55 Gallon (208 L)
NEMSI2.5 • 2.5 Gallons (9.5 L)	MSI100 • 100 Wipes

OPTI-CIDE³

Instrument Soak with Rust Inhibitor

Use this product as a disinfectant instrument soak. Opti-Cide³ effectively and quickly loosens and suspends blood and bodily fluids, non-organic and organic soil, and other cellular debris for easy removal.

Opti-Cide MAX is on the **EPA's List N** and has a 2 minute kill time for SARS-CoV-2 (COVID-19 virus) on hard, non-porous surfaces.

FEATURES & BENEFITS

- 2-Minute hard, non-porous surface disinfectant.
- Bactericidal, Fungicidal, Virucidal, Tuberculocidal.
- Ready-to-Use.

ORDER INFORMATION ▶ Item Code: OCP04-128RI • Size: 1 Gallon (3.8 L)

HIGH LEVEL DISINFECTANTS

Per the CDC, more healthcare associated infection outbreaks have been linked to contaminated endoscopes than to any other medical device. To prevent the spread of HAI, endoscopes must be properly cleaned and disinfected using an instrument detergent and high-level disinfectant after each use. Micro-Cide 28 HLD is a surfactant-free, activated glutaraldehyde liquid chemical sterilant and high-level disinfectant. When the powder activator is added, the solution turns green in color to indicate its readiness for use. In addition to the active ingredient, this ready-to-use solution contains buffers, wetting agents, a rust and corrosion inhibitor and a pleasant fragrance.

Micro-Cide 28 HLD produces high-level disinfection in 25 minutes and complete sterilization in 10 hours at room temperature. It is reusable for 28 days. You can check that the formula is meeting minimally effective concentration (MEC) levels before each use with Micro-MEC, our test strips.

Micro-Cide 28 HLD

3% Glutaraldehyde Reusable Sterilizing and High Level Disinfecting Solution

Micro-Cide 28 HLD is a 3% glutaraldehyde solution with attached powder activator. Once activated, Micro-Cide 28 HLD can be used for 28 days to provide high level disinfection or sterilization, providing the solution is above the 1.8% minimum effective concentration and is used according to directions for use.

FEATURES & BENEFITS

- **Works Fast.** Achieves high level disinfection in 25 minutes. Works nearly twice as fast as the leading glutaraldehyde.
- **Long Lasting.** Once activated, can be used for 28 days providing directions for use are followed.
- **Moderate pH.** Compatible with heat sensitive scopes.
- **Color Indicator.** When the powdered activator is added, the solution turns green in color to indicate it is ready for use.

ORDER INFORMATION ▶ Item Code: MICROCIDE1 • Size: 1 Gallon (3.8 L)

MICRO-MEC

1.8% Glutaraldehyde Monitor Test Strips

Micro-MEC 1.8% Glutaraldehyde Monitor Test Strip is a glutaraldehyde concentration monitor for use with Micro-Cide 28 High Level Disinfectant. Micro-MEC can also be used with other brands of glutaraldehyde solutions. Micro-MEC cannot be used to validate the sterilization or disinfection process.

FEATURES & BENEFITS

- Monitors minimum effective concentrations of 1.8%.
- Ensures Micro-Cide 28 HLD is effective and safe for use.
- Clear visual standards to communicate PASS/FAIL.
- 2-minute read time.
- Compatible for use with other brands of glutaraldehyde solutions.

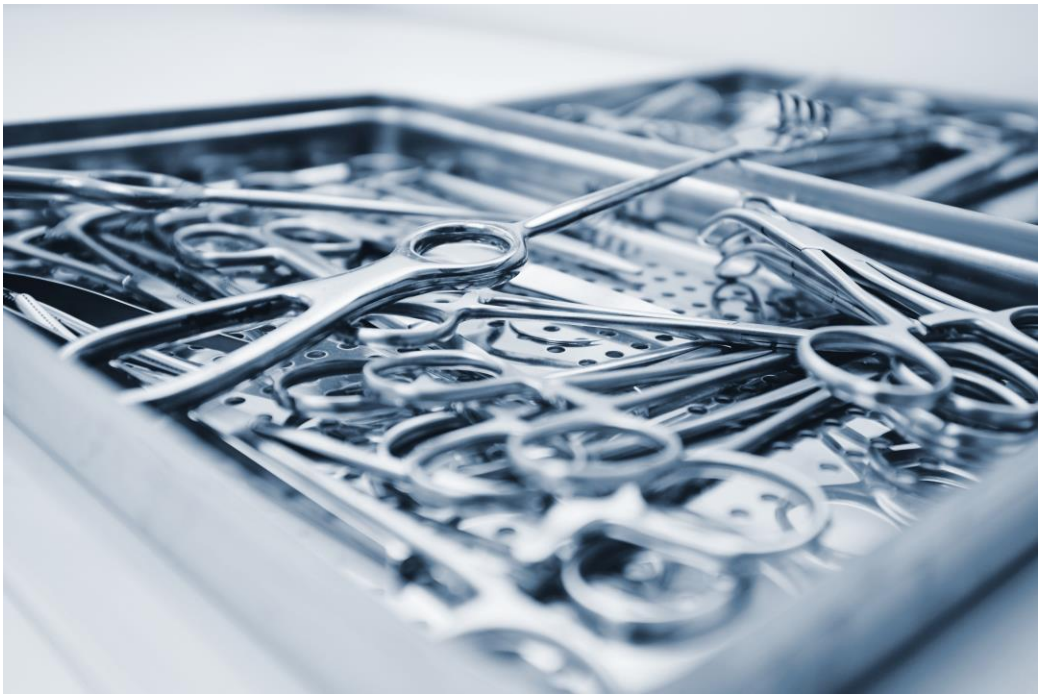
ORDER INFORMATION ▶ Item Code: M60054 • Contents: 60 Test Strips

PRESOAKING INSTRUMENTS

Choosing a cleaning product for your processing area depends on your needs. Often, time is limited and you're not able to wash soiled instruments immediately after a procedure. If this happens, the best way to keep soils moist and ready to be removed is with Cuts-It Gel. Simply place soiled instruments in a basin or sink and spray with the Instrument Spray. The gelling agents allow the product to cover and stay on soils and instruments longer in order to keep them moist. It is formulated with a blue dye, which makes it easy for the user to ensure uniform coverage. The wetting agents will keep instruments and soils wet for hours, allowing for safer and easier processing in decontamination.

CLEANING INSTRUMENTS

When ready to clean instruments, rinse the pre-spray off and place instruments in your wash sink. For cleaning basic instruments and equipment, use a general detergent such as high sudsing MicroKleen HS. When an ultrasonic cleaner or automatic washer is not available, or the instruments are very delicate, manual cleaning should be performed. MicroKleen HS detergent is specially formulated for manual use. It leaves instruments moving freely and spot-free. Alternatively, MicroKleen LS can be used as a pre-soak or cleaner. It removes blood, fats, synthetic lipids, and other soils quickly and effectively.



Cuts-It Gel

Instrument Pre-Soak

Cuts-It Gel Instrument Pre-Soak is specially formulated to safely remove blood, fat, tissue and body fluids from surgical instruments and equipment. The gelling agents allow the product to adhere to instruments and soil, while the blue dye makes it easy to ensure uniform coverage.

FEATURES & BENEFITS

- **Rapid and Effective.** Immediately softens and helps dissolve blood, fat, tissue and other body fluids.
- **Rust Inhibitors.** Reduces likelihood of rust, tarnish or corrosion.
- **Rinsing Agents.** Rinses spot & residue-free.
- **Neutral pH.** Safe and compatible with all metals.
- **Highly Concentrated.** Low cost per use.
- **Bacteriostatic.** If stored properly, not favorable to bacterial growth.
- **Environmentally Friendly.** Biodegradable, phosphate-free formula.

ORDER INFORMATION ▶ Item Code: M60005 • Size: 24 fl oz (710 mL)

MicroKleen HS

High Suds Neutral Detergent

MicroKleen HS High Suds Neutral Detergent is specially formulated for the manual cleaning of glass, plastic, rubber and metal surgical instruments and equipment. It removes blood, tissue and soil, and leaves instruments moving freely and spot-free.

FEATURES & BENEFITS

- **Rust Inhibitors.** Reduces likelihood of rust, tarnish or corrosion.
- **Rinsing Agents.** Rinses spot & residue-free.
- **Neutral pH.** Product safe and compatible with all metals.
- **Concentrated.** Low cost per use.
- **Bacteriostatic.** If stored properly, not favorable to bacterial growth.
- **Environmentally Friendly.** Biodegradable, phosphate-free, VOC free formula.

ORDER INFORMATION ▶ Item Code: B2 • Size: 1 Gallon (3.8 L)

MicroKleen LS

Low Suds Neutral Detergent

Micro-Scientific MicroKleen LS Low Suds Neutral Detergent is specially formulated for manual cleaning and for use in ultrasonic washers and automatic washing equipment. MicroKleen LS leaves instruments moving freely and spot-free.

FEATURES & BENEFITS

- **Rust Inhibitors.** Reduces likelihood of rust, tarnish or corrosion.
- **Rinsing Agents.** Rinses spot & residue-free.
- **Highly Concentrated.** Low cost per use.
- **Neutral pH.** Product safe and compatible with all metals.
- **Low Sudsing.** Compatible with all equipment & pump systems.
- **Bacteriostatic.** If stored properly, not favorable to bacterial growth.
- **Environmentally-Friendly.** Biodegradable, phosphate-free, VOC free formula.

ORDER INFORMATION ▶ Item Code: B1 | Size: 1 Gallon (3.8 L)

Cool Soak

Stain & Rust Remover

Cool Soak Stain & Rust Remover is specially formulated to remove rust, water spots and detergent residue from stainless steel and tungsten carbide surgical instruments, automatic washing equipment and autoclaves.

FEATURES & BENEFITS

- **Removes Stains and Rust.** Restores instruments' luster and shine.
- **Dissolves Residues.** Keeps box locks moving freely.
- **Instrument Safe.** If used properly, does not harm stainless steel or tungsten carbide instruments.
- **Bacteriostatic.** If stored properly, not favorable to bacterial growth.

ORDER INFORMATION ▶ Item Code: T5 • Size: 1 Gallon (3.8 Liters)

Goo Gone

Topical and Surface Adhesive Remover

Micro-Scientific Goo Gone Topical and Surface Adhesive Remover removes tape and adhesives completely and safely from instruments, equipment and containers. The unique formula painlessly removes tape and adhesives from skin and is non-irritating.

FEATURES & BENEFITS

- **Safe.** Product is safe and compatible with all metals.
- **Rapid and Effective.** Removes tape and adhesives quickly and effortlessly.
- **Painless.** Does not harm skin while allowing removal of tape and adhesives without discomfort.
- **Highly Concentrated.** Low cost per use.
- **Bacteriostatic.** If stored properly, not favorable to bacterial growth.
- **Environmentally-Friendly.** Biodegradable, phosphate-free formula.

ORDER INFORMATION ▶ Item Code: R6A • Size: 16 fl. oz (472 mL)

ENZYMATIC DETERGENTS

What are Enzymes?
Enzymes are proteins that act as a catalyst to break down bioburden and other organic materials. Enzymatic detergents have a neutral pH and include stabilizers that keep enzymes from degrading in solution.

Several types of enzymes used in our products:

- **Protease** removes protein contained in blood and saliva
- **Amylase** removes starches and carbohydrates
- **Lipase** removes fats
- **Cellulase** removes fibers and biofilm

Cleaning with Enzymes
To assist in removing blood and tissue, the Association for the Advancement of Medical Instruments (AAMI) recommends an enzymatic detergent. Proper care and handling of instruments always begins with good preparation and hygiene. Make sure to follow OSHA regulations and AAMI guidelines. When working with bioload, wear proper protective equipment, as no detergent or disinfectant can safeguard you from infection if exposed to contaminants.

Know the chemicals you're using and make sure to have appropriate information on your products, including SDS and correctly labeled product with usage instructions. Never refill a container unless it is marked as a refillable bottle.

Cleaning should take place beneath the water level in order to reduce the chance of contaminants becoming air borne. Enzymatic detergents should be allowed some additional time to work effectively; soak soiled instruments for at least 3 minutes. Wash water should be changed when visibly soiled or when the sink temperature is below product recommendations.

ENZYCLEAN

Protease Enzyme Low Suds Detergent

Enzyclean Protease Enzyme Low Suds Detergent is specially formulated for use as a presoak or manual detergent and for use in ultrasonic washers, automatic washing equipment and evacuators. Enzyclean is safe for glass, plastic, rubber and all types of metal surgical instruments, as well as flexible and rigid fiber optic equipment.

FEATURES & BENEFITS

- **Protease Enzymes.** Protease enzymes effectively break down proteins.
- **Rust Inhibitors.** Reduces likelihood of rust, tarnish or corrosion.
- **Rinsing Agents.** Rinses spot & residue-free.
- **Highly Concentrated.** Low cost per use.
- **Neutral pH.** Product safe and compatible with all metals.
- **Low Sudsing.** Compatible with most equipment & pump systems.
- **Bacteriostatic.** If stored properly, not favorable to bacterial growth.
- **Environmentally-Friendly.** Biodegradable, phosphate-free, VOC free formula.

ORDER INFORMATION ▶ Item Code: EBL1 • Size: 1 Gallon (3.8 L)

ENZYCLEAN II

Dual Enzyme Detergent

Enzyclean II Dual Enzyme Detergent is specially formulated for use as a presoak or manual detergent. The **protease** and **amylase** enzymes in Enzyclean II break down organic and inorganic soils, residues, films and deposits and ensure thorough and complete cleaning, leaving instruments moving freely and spot-free.

FEATURES & BENEFITS

- **Dual Enzyme.** Protease enzyme effectively breaks down proteins. Amylase enzyme breaks down carbohydrates.
- **Rust Inhibitors.** Reduces likelihood of rust, tarnish or corrosion.
- **Rinsing Agents.** Rinses spot & residue-free.
- **Highly Concentrated.** Low cost per use.
- **Neutral pH.** Safe and compatible with all metals.
- **Bacteriostatic.** If stored properly, not favorable to bacterial growth.
- **Environmentally-Friendly.** Biodegradable, phosphate-free formula.

ORDER INFORMATION ▶ Item Code: B9 • Size: 1 Gallon (3.8 L)

ENZYCLEAN II LS

Dual Enzyme Low Suds Detergent

Enzyclean II LS Dual Enzyme Low Suds Detergent is formulated for use as a presoak or manual detergent and for use in ultrasonic washers, automatic washing equipment and evacuators. The **protease** and **amylase** enzymes in Enzyclean II LS break down organic and inorganic soils, residues, films and deposits and ensure thorough and complete cleaning, leaving instruments moving freely and spot-free.

FEATURES & BENEFITS

- **Rapid and Effective.** Immediately softens and helps dissolve blood, fat, tissue and other body fluids.
- **Rust Inhibitors.** Reduces likelihood of rust, tarnish or corrosion.
- **Rinsing Agents.** Rinses spot & residue-free.
- **Low Sudsing.** Compatible with most equipment & pump systems.
- **Neutral pH.** Product safe and compatible with all metals.
- **Bacteriostatic.** If stored properly, not favorable to bacterial growth.
- **Environmentally Friendly.** Biodegradable, phosphate-free formula.

ORDER INFORMATION ▶ Item Code: Z6 • Size: 1 Gallon

ENZYCLEAN IV

Multiple Enzyme Detergent

Enzyclean IV Multiple Enzyme Detergent is specially formulated for use as a presoak or manual detergent and for use in ultrasonic washers, automatic washing equipment and evacuators. The **protease**, **lipase**, **amylase** and **cellulase** enzymes in Enzyclean IV break down organic and inorganic soils, residues, films and deposits and ensure thorough and complete cleaning, leaving instruments moving freely and spot-free.

FEATURES & BENEFITS

- **Four Enzymes.** Protease enzyme effectively breaks down proteins. Lipase enzyme breaks down fats. Amylase enzyme breaks down carbohydrates. Cellulase enzyme breaks down cellulose. All four enzymes work together to prevent biofilm.
- **Rust Inhibitors.** Reduces likelihood of rust, tarnish or corrosion.
- **Rinsing Agents.** Rinses spot & residue-free.
- **Highly Concentrated.** Low cost per use.
- **Neutral pH.** Product safe and compatible with all metals.
- **Low Sudsing.** Compatible with most equipment & pump systems.
- **Lubricating.** Leaves instruments moving freely and prolongs life of instruments.

ORDER INFORMATION ▶ Item Code: 128EME • Size: 1 Gallon (3.8 L)

INSTRUMENT LUBRICANTS

Once cleaned, instruments should be thoroughly rinsed in order to remove any detergent residue. Residue may interfere with sterilization and cause stiff or sticky instruments or discoloration. In order to prolong the life of instruments, it is best to perform instrument lubrication every time instruments are cleaned. This can be done manually with MicroLube C.

For a lubricant bath, shake the product well and then mix one part product to six parts sterile water. Keep the bath covered between uses in order to keep product fresh and uncontaminated. Thoroughly air dry instruments or use lint free towels to wipe instruments off before putting into the bath. Any residual water could further dilute the product and eventually affect the results of the lubricant. Instruments should be opened and then submerged for 30 seconds or more before removing.

Allow to thoroughly dry by laying open instruments on towels for several minutes. When put through an autoclave, residual lubricant in liquid form can create a brown looking stain on the surface of the instrument. In order to avoid this, ensure that surfaces are thoroughly dried before preparing for sterilization.

A good lubricant does not include silicone and will not interfere with most types of sterilization. It will also create an instrument that moves freely and helps prevent pitting and rusting. Chemicals should be stored in a cool dry place when not in use. A standard process for cleaning and lubrication should be written and posted.

MicroLube C

Instrument Lubricant

MicroLube C is specially formulated to be used as a lubricant and rust inhibitor for all types of surgical and dental instruments, including carbon steel. It is compatible with all sterilization methods, and if stored properly, can be reused for 28 days without becoming contaminated.

FEATURES & BENEFITS

- **Non-silicone Lubricant.** Patient-safe lubricant will not cause abscesses in body.
- **Rust Inhibitors.** Reduces likelihood of rust, tarnish or corrosion. Extends life of instruments, resulting in fewer repairs.
- **Neutral pH.** Product safe and compatible with all metals.
- **Bacteriostatic.** If stored properly, not favorable to bacterial growth.
- **Environmentally-Friendly.** Phosphate-free formula.

ORDER INFORMATION ▶ Item Code: T2 • Size: 1 Gallon (3.8 Liters)

HAND CARE

Opti-Scrub is a ready to use, highly effective emolliated, antimicrobial hand and skin cleanser. It is especially useful in areas where the control of direct cross contamination is important. Opti-Scrub meets OSHA bloodborne pathogen requirements for effective handwashing in healthcare facilities and is formulated following strict FDA Good Manufacturing Practices. Opti-Scrub is safe for use as an antimicrobial hand cleanser, a full body skin wash, and may safely be used on the hair or scalp. The use of Opti-Scrub as a shower cleanser and shampoo will significantly reduce microbial skin populations.

Opti-Scrub

Antimicrobial Liquid Soap

Opti-Scrub is a ready-to-use, highly effective emolliated, antimicrobial hand and skin cleanser. It is especially useful in areas where the control of direct cross contamination is important.

FEATURES & BENEFITS

- **Antimicrobial.** Broad spectrum antimicrobial effectiveness.
- **Emolliated.** May be used safely on hair or the scalp or as a full body skin wash.
- **Non-Drying.** Contains moisturizers, conditioners and skin protectants.

ORDER INFORMATION

OS04128 | 1 Gallon (3.8 L) • OS12018 | 18 fl oz (532 mL)

For more information and to request product samples, please contact:

Jeff Minarik
Vice President of Sales
Phone: 847.722.0909
jminarik@micro-scientific.com