Decon Labs, Inc.

SporGon

High-Level Disinfectant/ Sterilizing Solution

Technical Data Sheet

- BRIEF DESCRIPTION -

SporGon is a ready-to-use hydrogen peroxide/peracetic acid-based high-level disinfectant and sterilant. Its ready-to-use formula requires no mixing and no activation. It has broad spectrum efficacy against bacteria, virus & fungi including TB, and many other pathogenic organisms. SporGon also passed the AOAC Sporicidal Test effectiveness in killing the spores of Bacillus subtilis and Clostridium sporogenes in three hours and thus met the FDA established criteria for chemical sterilant (FDA 510K Clearance). SporGon achieves high-level disinfection in 15 minutes and sterilization in 3 hours at room temperature.

SporGon is far less toxic than gluteraldehyde-based high-level disinfectants and is far less corrosive than chlorinated disinfectants. No test strip is required to test the concentration of active ingredients and solution can be reused for medical devices for 14 days when used as directed.

-USE PROTOCOL -

Directions for High-level Disinfection:
SporGon achieves high-level disinfection (destroys all pathogenic microorganisms, except for large numbers of bacterial endospores, but including *Mycobacterium* strains as represented by *M. bovis*-Quantitative TB method) when used according to the Directions for Use at 68°F (20° C) with a contact time of 15 minutes . (For a medical device reuse period not to exceed 14 days.)

Directions for Sterilization:
SporGon achieves sterilization (eliminates all microorganisms including *Clostridium sporogenes* and *Bacillus subtilis* spores) when used or reused according to the Directions for Use at 68° (20° C) with a contact time of 180 minutes (3 hours). (For a medical device reuse period not to exceed 14 days.)

Directions for Use: Refer to package insert (reprinted at the end of this bulletin) for more detailed product usage/data.

-ACTIVE INGREDIENTS-

Hydrogen peroxide .....7.35 %
Peracetic Acid 0.23%

-EFFICACY-

Organism With Spores	Contact Time
Bacillus subtilis	180 minutes
Clostridium sporogenes	180 minutes
Vegetative Organisms	
Mycobacterium bovis	15 minutes
Staphylococcus aureus	3 minutes
Salmonella choleraesuis	3 minutes
Pseudomonas aeruginosa	3 minutes
Fungi	
Trichophyton mentagrophytes	5 minutes
Viruses	
Non-lipid Small Virus	
Polio 2	5 minutes
Lipid Medium Virus	
Herpes simplex	5 minutes
HIV-1	5 minutes

460 Glennie Circle • King of Prussia, PA 19406 • (610) 755-0800 • Fax (610) 270-8905

-Medical Device Sterilization-
-Reuse Period-

SporGon has demonstrated efficacy in the presence of 5% organic soil contamination and a simulated amount of microbiological burden during reuse. The hydrogen peroxide and peracetic acid concentration of this product will remain stable and effective during its use life (14 days reuse for medical devices). **SporGon must be discarded after 14 days**. Due to the lack of test strips for monitoring the concentration of active ingredients, the reuse period is limited to 14 days.

- STORAGE AND DISPOSAL -

STORAGE. The shelf life for SporGon is two years from date of manufacture. Store in its original sealed container at room temperature 15°- 30°C (59°– 86°F). **DO NOT ALLOW SPORGON TO FREEZE.**

CONTAINER DISPOSAL. Container must be triple rinsed and disposed of in accordance with federal, state and/or local regulations.

USED SOLUTION DISPOSAL. Used solution should be disposed of in accordance with federal, state and/or local regulations.

DISPOSAL OF INFECTIOUS MATERIALS. Blood and other body fluids should be autoclaved and disposed of according to local regulations for infectious waste disposal.

- PRECAUTIONARY STATEMENTS -

KEEP OUT OF REACH OF CHILDREN.

Contains Hydrogen Peroxide and Peracetic Acid. Direct contact is corrosive to exposed tissue, causing irreversible eye damage and skin irritation/damage. Do not get into eyes, on skin or on clothing. Appropriate hand, eye, and face protection (goggles, face shield or safety glasses) as well as liquid proof gowns should be worn when cleaning and sterilizing/ disinfecting soiled devices and equipment. Avoid contamination of food. Use in a well-ventilated area in closed containers. Wash thoroughly with soap and water after handling. Harmful if inhaled. Avoid breathing (vapor or spray mist). Remove contaminated clothing and wash before reuse.

Statement of Practical Treatment In case of contact, immediately flush eyes or skin with copius amounts of water for at least 15 minutes. For eyes, get medical attention. Harmful if swallowed. Drink large quantities of water and call a physician immediately.

NOTE TO PHYSICIAN. Probable mucosal damage may contraindicate the use of gastric lavage.

-PACKAGING -

1 Gallon (3.8 L) / 4 per case

- AVAILABILITY -

Manufactured for:	Item	Cat. No.
Decon Labs, Inc.	**1 Gallon.**	**4301**

For Additional Technical Information call
Decon Customer Service
(800) 332-6647 or
See our Website at www.deconlabs.com

SPORGON ™

Sterilizing and Disinfecting Solution

A. INTENDED USE/DIRECTIONS FOR USE

Sporgon solution is a liquid chemical sterilant and a high-level disinfectant when used according to the Directions for Use.

1. Germicide Level of Activity

Sporgon can be used at the following germicide levels of activity:

High Level Disinfection:

14 Day Reuse: **Sporgon** is a high-level disinfectant when used or reused, according to the Directions For Use, at **68°F (20°C)** with an immersion time of **15 minutes** for a use period not to exceed **14 days.**

Sterilant:

14 Day Reuse: **Sporgon** is a sterilant when used or reused, according to the Directions For Use, at **68°F (20°C)** with an immersion time of **180 minutes** (3 hours) for a use period not to exceed **14 days.**

2. Reuse Period

Sporgon has demonstrated efficacy in the presence of five percent (5%) organic soil contamination and a simulated amount of microbiological burden under the following temperatures:

68°F (20°C) - with a contact time of **15 minutes** and the product discarded after **14 days** for high-level disinfection. For sterilization, a contact time of **180 minutes (3 hours)** is required with the product discarded after **14 days.**

3. General Sterilization/Disinfection Information

Choose a germicide with the level of microbial activity that is appropriate for the reusable medical device or equipment surface. Follow the reusable device labeling and standard institutional practices. In the absence of complete instructions, use the following guidance:

First, for patient contacting devices, determine whether the reusable device to be processed is a critical or semi-critical device.

- A critical device routinely penetrates the skin or mucous membranes during use or is otherwise used in normally sterile tissues of the body.
- A semi-critical device makes contact with mucous membranes but does not ordinarily penetrate sterile areas of the body.

Second, determine the level of sterilization/disinfection required:

- *Critical Device* - Sterilization is required.
- *Semi-critical Device* - Although sterilization is recommended whenever practical, high-level disinfection is acceptable (e.g. GI endoscopes, anesthesia equipment to be used in the airway, diaphragm-fitting rings, etc.)

Third, determine the time needed to achieve the level of disinfection or sterilization required for the specified medical device as indicated on the **Sporgon** solution label.

4. The germicidal activity of Sporgon was demonstrated using stressed solutions* in performance, clinical and simulated use testing using the following organisms:

	20°C 14 Day Reuse*
Spores	180 minutes
• *Bacillus subtilis*	
• *Clostridium sporogenes*	
Vegetative Organisms	15 minutes
• *Staphylococcus aureus*	3 minutes
• *Salmonella choleraesuis*	3 minutes
• *Pseudomonas aeruginosa*	3 minutes
• *Mycobacterium bovis*	15 minutes
Fungi	
• *Trichophyton mentagrophytes*	5 minutes
Non-lipid Small Virus	
• *Polio 2*	5 minutes
Lipid Medium Virus	5 minutes
• *Herpes simplex*	
• *HIV- 1* (Human Immunodeficiency Virus)	

* Testing was performed using **Sporgon** solution which had been stressed in accordance with EPA "Reuse Test Protocol Specifications" and aged 46 days. Due to a lack of a test strip for monitoring concentration of active ingredients the reuse period is limited to 14 days.

5. Device/Material Compatibility

Sporgon solution is recommended for usage with medical devices made from the materials shown below.

- Black Anodized Aluminum**
- 303 Stainless Steel
- Teflon*
- Polyethylene*
- Polyethylene Tubing*
- Polyurethane*
- Black Rubber*
- Cemedine (epoxy)/Liquid Silicone***
- Adhesive***
- Loctite Impruv- Loctite 330++
- Masterbond

**Represents 1500 cycles - 20 minute exposure plus rinsing and drying.*
***Some loss of color observed after 48 cycles; complete color loss observed on some specimens from 394 cycle to 657 cycles. (No damage to base metal was observed).*
****Cemedine epoxy adhesive remained flexible with good adhesion for 72 hours immersed in Sporgon at 20 °C. Cemedine epoxy adhesive became brittle and failed adhesively at 50°C immersion for 30 hours. Liquid silicone adhesive remained flexible with good adhesion for 72 hours at 20°C. Liquid silicone adhesive maintained shiny appearance with good flexibility, but failed adhesively at 50°C with 30 hours immersion.*

Note: Similar tests were conducted at 50°C in tap water with failure of flexibility and adhesion observed between 20 and 44 hours of immersion. This suggests that adhesive damage and/or failure is likely due to elevated solution temperature rather than due to chemical action.

++Loctite Impruv and Loctite 330 adhesive remained optically clear with good adhesion at 63°C with a 24-hour immersion.

CAUTION: Material compatibility, adhesive compatibility, tuberculocidal, sporicidal, simulated use, and clinical testing demonstrate that Sporgon is compatible with flexible fiberoptic endoscopes used for endoscopic retrograde cholangipancreatography, including bronchial scopes, gastrointestinal endoscopes, and colonoscopes. Do not use with devices with labeling contraindicating use with hydrogen peroxide or peracetic acid solutions. Contact the reusable device manufacturer for information on compatibility.

Following sterilization or disinfection, the sterilized or disinfected medical device should be rinsed according to the Directions for Use, Rinsing (Section D.4), and dried according to manufacturer's instructions.

6. Pre-cleaning Agent Compatibility

Sporgon is compatible with enzymatic detergents which are neutral in pH, low foaming and easily rinsed from equipment. Detergents that are either highly alkaline or acidic are contraindicated as precleaning agents since improper rinsing could effect the efficacy of the **Sporgon** solution by altering its pH.

B. WARNINGS

SPORGON IS HAZARDOUS TO HUMANS AND DOMESTIC ANIMALS

DANGER: Keep Out of Reach of Children.

Contains Hydrogen Peroxide and Peracetic Acid

1. Direct contact is corrosive to exposed tissue, causing eye damage and skin irritation/damage. Do not get into eyes, on skin or on clothing.
2. Avoid contamination of food.
3. Use in well-ventilated area in closed containers.

In case of contact, immediately flush eyes or skin with copious amounts of water for at least 15 minutes. For eyes, seek medical attention.

Harmful if swallowed. Drink large quantities of water or milk and call a physician immediately.

Emergency, safety, or technical information about **Sporgon** can be obtained from Decon Labs at 1-800-332-6647.

C. PRECAUTIONS

1. Sterilant Usage

Routine biological monitoring is not possible with **Sporgon** solution, and therefore **Sporgon** solution should NOT be used to sterilize reusable medical devices that are compatible with automated sterilization processes that can be biologically monitored.

Sporgon solution should not be used for sterilization of critical devices intended for single use (e.g. catheters).

2. High-Level Disinfectant Usage

Sporgon should not be used to high-level disinfect a semi-critical device when heat sterilization is practical.

3. Endoscope Usage

Sporgon is not the method of choice for sterilization of rigid endoscopes which the device manufacturer indicates are compatible with steam sterilization.

4. Appropriate hand, eye and face protection MUST be worn when cleaning and sterilizing/disinfecting soiled devices and equipment.

5. Contaminated reusable devices MUST BE THOROUGHLY CLEANED prior to disinfection or sterilization, since residual contamination will decrease effectiveness of the germicide.

6. The user MUST adhere to the DIRECTIONS FOR USE since any modification will affect the safety and effectiveness of the germicide.

7. The reusable device manufacturer should provide the user with a validated reprocessing procedure for that device using **Sporgon** solution.

D. DIRECTIONS FOR USE

Sporgon is a ready to use disinfectant/sterilant solution. **Sporgon** is for use in manual (bucket and tray) systems made from polypropylene, ABS, polyethylene, glass-filled polypropylene or specially molded polycarbonate plastics and stainless steel.

1. Record initial date of use and the expiration date (14 days hence) in a log book or a label affixed to any secondary container used to contain the solution. **Sporgon must be discarded after 14 days.**

2. Cleaning/Decontamination

Blood and other body fluids must be thoroughly cleaned from the surfaces, lumens, and objects before application of the disinfectant/sterilant. Blood and other body fluids should be autoclaved and disposed of according to all applicable federal, state and local regulations for infectious waste disposal.

For Sporgon to be an effective disinfectant or sterilant, thoroughly clean, rinse and rough dry medical instruments and equipment. Clean and rinse the lumens of hollow instruments before filling with **Sporgon** solution. Refer to the reusable device manufacturers labeling for instructions on disassembly, decontamination, cleaning and leak testing of their equipment. Aviod dilution of the Sporgon solution.

3. Usage

IT IS VIOLATION OF FEDERAL LAW TO USE THIS PRODUCT IN A MANNER INCONSISTENT WITH ITS LABELING.

a. DIRECTIONS FOR STERILIZATION

(Bucket/Tray Manual System)

Sporgon is a liquid chemical sterilant for medical instruments and devices when used according to the Directions for Use.

14 Day Reuse Solution - at 68° F (20°C)

Sterilant: **Sporgon** is a sterilant for medical instruments/devices when used or reused, according to the DIRECTIONS FOR USE, at 68°F (20°C) with an immersion time of **180 minutes** (3 hours) for a use period not to exceed **14 days.**

Immerse medical equipment/devices completely in **Sporgon** solution for a minimum of 180 minutes (3 hours) at 68°F (20°C) to eliminate all microorganisms including *Clostridium sporogens* and *Bacillus subtilis* spores. Remove equipment from the solution using sterile technique and rinse thoroughly with sterile water following the rinsing instructions in Section D.4.

b. DIRECTIONS FOR HIGH-LEVEL DISINFECTION

(Bucket/Tray Manual System)

Sporgon is a liquid chemical high-level disinfectant for medical instruments and devices when used according to the Directions for Use. Medical instruments/devices when expected to come in contact without penetration of mucous membranes are semi-critical devices and therefore may be high-level disinfected.

14 Day Reuse Solution - at 68° F (20°C)

High-Level Disinfectant: **Sporgon** is a high-level disinfectant for medical instruments/devices when used or reused, according to the DIRECTIONS FOR USE, at 68°F (20°C) with an immersion time of **15 minutes** for a use period not to exceed **14 days.**

Immerse medical equipment/devices completely in **Sporgon** solution for a minimum of 15 minutes at 68°F (20°C) to destroy all pathogenic microorganisms, except for large numbers of bacterial endospores, but including *Mycobacterium* strains as represented by *M. bovis* (Quantitative TB Method). Remove equipment/devices from the solution and rinse thoroughly following the rinsing instructions below.

4. Rinsing Instructions

Following immersion in **Sporgon** solution, thoroughly rinse the equipment or medical device by immersing in two gallons of water. Repeat this procedure a second time with a fresh two-gallon volume of water.

For endoscopic instruments with lumens, a minimum of 500 ml of water should be flushed through lumens during each separate rinse unless otherwise noted by the device or equipment manufacturer. Use fresh volumes of water for each rinse. Discard the water following each rinse. Do not reuse the water for rinsing or any other purpose as it will become contaminated with hydrogen peroxide.

Refer to the reusable device/equipment manufacturer's labeling for rinsing instructions.

a. *Sterile Water Rinse:*
Critical devices which are sterilized with **Sporgon** must be rinsed with sterile water.

b. *Potable Water Rinse:*
A sterile water rinse is recommended when practical, for all devices. Alternatively, a high quality potable water (one that meets Federal Clean Water Standards at point of use) may be used.

The use of potable water for rinsing, increases the risk of contaminating the device or medical equipment with Pseudomonades and atypical (fast growing) Mycobacteria that are often present in potable water supplies. The devices (e.g. colonoscope) need to be completely dried, because any moisture remaining provides an ideal situation for rapid colonization of bacteria. Additionally, mycobacteria are highly resistant to drying, therefore, rapid drying will avoid possible colonization but may not result in a device free from atypical mycobacteria. A final rinse using a 70 percent isopropyl alcohol solution should be used to speed the drying process and reduce the numbers of any organism present as a result of rinsing with potable water.

E. REUSE

Sporgon solution has demonstrated efficacy in the presence of 5 percent (5%) organic soil contamination and a simulated amount of microbiological burden during reuse. The hydrogen peroxide and peracetic acid concentration of this product will remain stable and effective during its use life (14 days). **Sporgon must be discarded after 14 days.**

Due to lack of test strip for monitoring concentration of active ingredients the reuse period is limited to 14 days.

F. POST-PROCESSING HANDLING AND STORAGE OF REUSABLE DEVICES

Sterilized or disinfected reusable devices are either to be used immediately or stored in a manner to minimize contamination. Refer to reusable device equipment manufacturer's labeling for additional storage and/or handling instructions.

G. STORAGE CONDITIONS AND EXPIRATION DATE

1. **Sporgon** solution should be stored in its original sealed container at room temperature 15°-30°C (59°-86°F).
2. The expiration date of **Sporgon** solution will be found on the bottle.
3. Do not allow **Sporgon** solution to freeze. **Sporgon** solution known to have been frozen, cloudy, or exhibit visible precipitants, (i.e. particles) should not be used, but discarded immediately.

H. SAFETY INFORMATION

Emergency, safety, or technical information about **Sporgon** can be obtained from Decon Labs at 1-800-332-6647.

I. USER TRAINING

The user should be adequately trained in the decontamination and disinfection or sterilization of medical devices and the handling of liquid chemical germicides. Additional information about **Sporgon** solution can be obtained from Decon Labs at 1-800-332-6647.

J. DISPOSAL INFORMATION

Used solution should be disposed of in accordance with Federal, State and Local regulations. Thoroughly rinse container and discard in trash.

SPORGON DISINFECTANT/STERILANT SOLUTION ENDOSCOPE REPROCESSING

A. INTENDED USE/DIRECTIONS FOR USE

Sporgon is a liquid chemical sterilant and high-level disinfectant for medical instruments and devices when used according to the Directions for Use.

Medical instruments/devices, when expected to penetrate the skin or mucous membranes or are used in otherwise normally sterile tissues of the body during use, are critical devices and are therefore, required to be sterile.

Medical instruments and devices when expected to come in contact without penetration of mucous membranes are semi-critical devices and therefore may be high-level disinfected.

Germicide Level of Activity

Sporgon can be used at the following germicide levels of activity:

High-Level Disinfection:

14 Day Reuse: **Sporgon** is a high-level disinfectant when used or reused, according to the Directions For Use, at **68°F (20°C)** with an immersion time of **15 minutes** for a use period not to exceed **14 days**.

Sterilant:

14 Day Reuse: **Sporgon** is a sterilant when used or reused, according to the Directions For Use, at **68°F (20°C)** with an immersion time of **180 minutes** for a use period not to exceed **14 days**.

B. GENERAL PROCEDURE FOR HIGH-LEVEL DISINFECTION OF FLEXIBLE ENDOSCOPES

(This procedure is recommended in the absence of specific directions from the device manufacturer.)

1. Train Personnel

- Personnel involved in the reprocessing of endoscopes should have the ability to read, understand, and implement instructions from manufacturers and regulatory agencies as they relate to endoscopic disinfection.
- The person(s) to whom the job of reprocessing endoscopes is given should have the opportunity to become completely familiar with the mechanical aspects of the endoscopic equipment.
- Training should include familiarization with government regulations and in-house policies on how to appropriately and safely handle liquid chemical germicides.
- Training should also include information on the safe handling of instruments that are contaminated with body fluids after use. This should include familiarization with universal precautions.

2.Cleaning of Flexible Endoscopes

a. Cleaning at the Examination Room

Reflux of body fluids from the patient may occur in any of the standard channels. Cleaning of endoscopes and accessories should be performed promptly after removing the endoscope from the patient to prevent drying of secretions.

1. Don all personal protective equipment.
2. Prepare an enzyme detergent or one recommended by the scope manufacturer.
3. Gently wipe all debris from the insertion tube with a moistened gauze or cloth.
4. Place the distal end of the flexible endoscope into the water and enzyme detergent solution and aspirate through the biopsy/suction channel for 5-10 seconds or until the solution is visibly clean. Alternate aspiration of the detergent solution and air several times. Finish by suctioning air.
5. Flush or blow out air and water channels in accordance with the endoscope manufacturers instructions.
6. Transport the endoscope to the reprocessing area.

b. Cleaning at the Reprocessing Area

1. Attach any necessary water-tight caps to the electrical portions of the umbilicus.
2. Before proceeding with any further cleaning steps, the flexible endoscope should be leak tested. (Refer to manufacturer's leakage test instructions.) Follow the manufacturer's instructions if the instrument appears damaged.
3. Fill a sink or basin with a freshly made enzyme detergent solution.
4. Immerse the endoscope. All channels should be irrigated with copious amounts of detergent and tap water to soften, moisten, and dilute the organic debris. All detachable parts (e.g., hoods and suction valves) should be removed and soaked in the detergent solution. The insertion tube should be washed with detergent solution and rinsed.
5. Use a small soft brush to scrub all detachable parts.
6. Use a brush to clean under the suction valve, air/water valve and biopsy port openings.
7. Brush the entire suction/biopsy system including the body, the insertion tube, and the umbilicus of the endoscope in accordance with the manufacturer's instructions.
8. Accessible channel(s) should be brushed to remove particulate matter, and the detergent solution must be suctioned or pumped through all channels to remove dislodged material. Channel irrigators may be useful for this step. Fill all channels with detergent solution and soak in accordance with the manufacturer's label instructions.

3. Rinse After Cleaning

a. Rinse the endoscope and all detachable parts in clean water.
b. Rinse all channels well with water to remove debris and detergent.
c. Purge water from all channels and wipe dry the exterior of the endoscope with a soft clean cloth to prevent dilution of the **Sporgon** disinfectant used in subsequent steps.

4. Manual Sterilization/Disinfection

a. Attach channel irrigators/adapters and cover the biopsy port in accordance with the manufacturer's instructions.
b. Pour **Sporgon** into an appropriate sized basin or tray in an amount to completely submerge all surfaces of the endoscope.
c. Completely immerse the endoscope in the basin of **Sporgon.**
Note: In order to prevent damage to the endoscope, DO NOT soak any other accessory equipment with the endoscope.
d. Inject the **Sporgon** solution into all channels of the endoscope until it can be seen exiting the opposite end of each channel. Assure that all channels are filled with disinfectant and that no air pockets remain within the channels.
e. Cover the disinfectant soaking basin with a tight fitting lid to minimize chemical vapor exposure.
f. Soak the endoscope for the designated use time at the appropriate temperature. Use a timer to ensure adequate soaking time.
g. Before completely removing the endoscope from the disinfectant, flush all channels with air to remove disinfectant.

5. Rinse After Manual Sterilization or Disinfection

a. *Rinse 1:* Fill a basin with two gallons of water (preferably sterile water). Place the endoscope into the basin and thoroughly rinse the exterior of the scope. Attach channel irrigators/adapters to the endoscope and flush with 500 ml of water through the channel irrigator. Empty basin.
b. *Rinse 2:* Fill a basin with two gallons of water (preferably sterile water). Place the endoscope into the basin and thoroughly rinse the exterior of the scope and flush with 500 ml of water through the channel irrigator.
c. Purge all channels with air.
d. Flush all channels with 70% isopropyl alcohol until the alcohol can be seen exiting the opposite end of each channel.
e. Purge all channels with air.
f. Remove all adapters and devices.

6. Storage

a. Dry the exterior of the endoscope with a soft clean cloth. Do not attach detachable parts to the endoscope prior to storage. Storage of endoscopes with the removable parts detached lowers the risk of trapping liquid inside the instrument and facilitates continued drying of the channels and channel openings. To prevent the growth of water borne organisms, the endoscope and all detached parts should be thoroughly dried prior to storage.
b. Hang the endoscope vertically with the distal tip hanging freely in a well-ventilated, dust-free cabinet.

REFERENCES:

1. ASTM: F 1518-94, Standard for Cleaning and Disinfection of Flexible Fiberoptic and Video Endoscopes Used in the Examination of the Hollow Viscera, current edition approved May 15, 1994, published July 1994.
2. Martin, M.A., MD, Reichelderfer, M., APIC guideline for infection prevention and control in flexible endoscopy, Association for Professionals in Infection Control and Epidemiology, Inc., AJIC Am J Infect Control 1994: 22:19-38.
3. Vesley, D. et. al., Significant factors in the disinfection and sterilization of flexible endoscopes, AJIC, December 1992, pg. 292.
4. Axon, A.T.R., Bond, B., Bottrill, P.M., Cowen, A.E., Fleisher, D.E. and Tandon, R.K., Endoscopic Disinfection, Working Party Reports, Blackwell Scientific Publications, 1990, 46-50.

REORDER INFORMATION

Catalog #	Description	Case Contains
4301	1 gallon	4 gals/case

Decon Labs, Inc.

460 Glennie Circle
King of Prussia,PA 19406
1-800-332-6647