

DrainGel™

Bacterial Formulation for Removal of Organic Material from Drain Lines and Non-Drain Areas

- ◆ Removes “biofilm” and organic material from drain lines and floor sinks
- ◆ Reduces noxious drain odors and improves flow in slow drains
- ◆ Designed to cling to the sides of drains and pipes
- ◆ Can be sprayed onto hard-to-access non-drain areas
- ◆ Safe for all plumbing and septic
- ◆ Biodegradable, non-toxic, non-caustic and non-pathogenic

Description

Dialysis clinics have long been plagued by the accumulation of “biofilm” in drains, drain lines, and floor sinks. Biofilm is a combination of the proteinaceous by-products discharged in dialysate and a “film” of bacteria indigenous to clinic drain lines. This organic waste is unsightly and odorous. It also acts as a breeding site for various small-fly species and denotes “unsanitary conditions” to clinic staff and patients. Clinics often try pouring caustic drain cleaners, bleach, and hot water down drains to remove biofilm --- none of these work.

DrainGel™ is a professional strength surfactant-bacterial product that quickly and safely removes biofilm from drain lines and floor sinks. **DrainGel™** cultures specifically target and degrade lipids, proteins, and starch and eliminate the anaerobic conditions that cause odors. **DrainGel™** is safe for both patients and staff. It is non-toxic, non-hazardous, non-pathogenic, and non-caustic (rated less hazardous than bleach).

DrainGel™ application is quick and easy. It can be poured into drains and floor sinks or applied using a **DrainGel Sprayer** (see last page). Your patient’s comfort and trust is critical. **DrainGel™** will help keep your clinic sanitary and odor-free.

Product Characteristics

| | |
|-----------------|--------------------------|
| Bacteria Count: | 550 Billion/gallon |
| Bacteria Type: | Blend of Bacillus Spores |
| Salmonella: | Negative |
| Appearance: | Blue-green |
| Fragrance: | Herbal |
| Stability: | 2 years+ at 35°F to 95°F |
| pH Value: | 7.0-8.6 |

Performance Characteristics

| | |
|---------------------|---------------------|
| Bacterial Pathways: | Aerobic & Anaerobic |
| pH Range: | 4.5-8.5 |
| Temperature Range: | 50°F to 145°F |

Storage and Handling

Store in cool, dry place. Avoid eye contact. Wash hands thoroughly with warm, soapy water after contact.

Availability

- 32 Fl. Oz. (1 Quart) 946 ML Refillable Dispensing Bottles - 12 Per Case
- 128 Fl. Oz. (1 Gallon) - 3.79L - 4 Bottles Per Case
- 5 Gallon (18.95L) Pails
- 55 Gallon Drums

Additional Information

www.bio-systems.com

SEE LAST PAGE FOR DIALYSIS CLINIC APPLICATION INSTRUCTIONS



American Bio-Systems

(888) 371-3353 • Fax (888) 708-5353

customersupport@bio-systems.com • www.bio-systems.com

Section 1 - Product

| Product Name | Manufacturer/Distributor | Emergency Telephone Number |
|--------------|----------------------------|--|
| DrainGel | American Bio-Systems, Inc. | Phone: (888) 371-3353 Inquiry: American Bio-Systems, Inc. Emergency: (888) 371-3353 Outside USA: (888) 371-3353 |

Section 2 - Ingredients

| INGREDIENT | CAS NO. | OSHA PEL | AGCIH TLV/TWA |
|-------------------------|---------|----------|---------------|
| Proprietary Formulation | NA | NA | NA |

ALL COMPONENTS APPEAR ON THE TSCA INVENTORY. COMPONENTS NOT LISTED ARE EITHER PROPRIETARY, NON HAZARDOUS OR IN CONCENTRATIONS OF LESS THAN 1%.

Section 3 - Physical Characteristics

| | | | |
|---------------------|-----------------------|---------------|-----------|
| Specific Gravity | Approx. 1.0 | Boiling Point | Not known |
| Vapor Pressure | No data | Melting Point | N/A |
| Solubility | Complete | pH | 7.0-8.6 |
| Appearance and Odor | Blue liquid, perfumed | Vapor Density | No Data |

HMIS rating (0-4): Health = 1, Fire = 0, Reactivity = 0

Section 4 - Fire/Explosion

| | |
|------------------------------------|--|
| Flash Point (Deg C)/Method Used | NA |
| LEL | NA |
| UEL | NA |
| Extinguishing Media | Water spray, carbon dioxide, and dry chemical powder |
| Special Fire Fighting Procedures | None |
| Unusual Fire and Explosion Hazards | None known |

Section 5 - Reactivity Data

| | |
|--|----------------|
| Stability | Stable |
| Incompatibility | Not known |
| Hazardous Decomposition or By Products | Not known |
| Hazardous Polymerization | Will not occur |

Section 6 - Health Hazard Data

Acute Health Affects

| | |
|--------------|--|
| Ingestion | Ingestion may result in abdominal pain, nausea and vomiting. |
| Eyes | This product may cause eye irritation. |
| Skin Contact | Could cause mild skin irritation after prolonged contact. |

Section 6 - Health Hazard Data (continued)

Acute Health Affects (continued)

| | |
|-------------------------------------|--|
| Conditions to Avoid | Strong acids or alkali compounds may inactivate biological cultures. |
| Inhalation | Inhaling mist from this product could cause irritation to the lungs and mucous membranes. |
| Signs and Symptoms of Over Exposure | None known. |
| Aggravated Medical Conditions | None known, however persons with respiratory problems should avoid breathing any mist from this product. |

Emergency First Aid Procedures

| | |
|--------------|--|
| Eye Contact | Rinse eyes with water for fifteen minutes; if irritation persists, see a physician. |
| Skin Contact | Wash the product off the skin with soap and water; if irritation develops, seek the care of a physician. |
| Ingestion | Watch victim for any signs of illness, induce vomiting only if advised by a physician. |
| Inhalation | Move person to fresh air and avoid breathing mist from product. If breathing problems develop, seek the care of a physician. |

Section 7 - Spill or Leak Procedures

Steps to be taken in case material is spilled or leaked:

Waste Disposal Method: Contain and collect material, place in proper container for reuse or disposal. Dispose of materials in accordance with all federal, state and local laws.

Precautions To Be Taken In Handling and Storage: Store in a location away from children, food items and potable water. Store in an area out of the direct sunlight, keep container closed when not in use, avoid storing in a damp environment.

Always wash hands with soap and water before handling food or smoking.

Use good chemical hygiene practices when working with any chemical.

Other Precautions: None

Section 8 - Control Measures (PPE)

| | |
|---------------------------|---|
| Ventilation | Local exhaust should be sufficient. If used in a manner that creates a mist, mechanical ventilation may be necessary. |
| Respiratory protection | None required for normal use. |
| Protective gloves | Recommended. Disposable nitrile gloves are suitable for preventing prolonged contact with the skin. |
| Other protective clothing | None required, however, avoid contact with the skin from soiled clothing. |
| Eye protection | Safety glasses with sides shields or splash goggles are recommended. |

The information and recommendations contained in this Material Safety Data Sheet have been compiled from sources believed to be reliable and to represent current opinion on the subject when the MSDS was prepared. No warranty, guaranty or representation is made as to the correctness or sufficiency of the information. The user of this product must decide what safety measures are necessary to safely use this product, either alone or in combination with other products, and determine its environmental regulatory compliance obligations under any applicable federal, state and local laws.

DrainGel

DrainGel Treatment for Dialysis Clinics

The configuration of drains and drain lines vary significantly between dialysis clinics. Sanitization and cleaning protocols also vary. While **DrainGel™** will be effective regardless of the configuration or sanitization protocol, the following guidelines will insure optimal results.

The instructions below are general in nature and should be modified to the particular circumstances found in the clinic. In making these modifications, two basic principles should be followed:

- 1) Exposure of **DrainGel™** to sanitization agents, particularly strong chlorine bleaches, should be minimized. This can be accomplished by waiting several hours after using the sanitization agent before applying **DrainGel™**, or by rinsing the drains with water before applying **DrainGel™**.
- 2) Following **DrainGel™** application, treated drains and drain lines should be used as little as possible. For best results, apply **DrainGel™** late in the evening or, better yet, the evening before the day(s) the clinic is closed.



**DrainGel Sprayer (Capacity 1.5 Gallons)
and DrainGel (1 Gallon)**

Instructions for Use

PREPARATION:

1) Complete regular drain line sanitization protocol. If applying **DrainGel™** within four hours of protocol, pour 1-2 gallons of water into drain first, then begin “Start Up” application described below. (This is important because the microorganisms in **DrainGel™** may not be compatible with the sanitization agent used, particularly strong chlorine bleaches.)

2) For all applications, apply product at time of lowest drain use, ideally at end of day after the use of all cleaning and sanitization products has been completed.

START UP:

Add four ounces per day to each drain for 5-7 days. Application is usually best accomplished by using a **DrainGel Sprayer** (see photo). For floor sinks, attempt to coat sides of floor sink, the drain grate, and inside the drain itself (apply around edge of drain opening if possible). Spray **DrainGel™** until all reachable surfaces are wet. Insure that a full 4 ounces has been applied to each drain.

FOR MAINTENANCE:

Apply four ounces per drain once or twice per week in the same manner described under “Start Up” above.