# **Bio-Clean®** for Septic Systems

Mix Bio-Clean with warm water before pouring it down the drain.

### **METRIC CONVERSIONS**

1 tablespoon = 15ml 1/4 cup = 57 ml 1/3 cup = 76 ml 1/2 cup = 114 ml 1 pint = 1/2 litre 1 quart = 1 litre 1/2 gallon = 2 litres 1 gallon = 4 litres

1 pound = 454 g 1 cup of Bio-Clean = 180 grams = 16 tbsp. 1 tub of Bio-Clean (2 lbs.) = 80 tbsp. (approx.) 1 tub of Bio-Clean (2 lbs.) = 5 cups



### **Tips for Using Bio-Clean®**

Administer all treatments at the end of the day or before closing. If a blockage occurs after you have started using Bio-Clean, it is a sign that Bio-Clean is detaching the waste from the pipes. Clear the blockage with a plunger or a snake and continue treatment.

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## Instructions for Using Bio-Clean®

Mix Bio-Clean with warm water before pouring it down the drain.

## **Residential Applications**

### BATHTUBS

Mix 2 tablespoons of Bio-Clean with 1 quart of warm water and treat for 5 straight days. Then mix 2 table-spoons of Bio-Clean with 1 quart of warm water and treat once a week after the initial 5 day treatment.

### **BROKEN PIPES**

Bio-Clean is perfect for sewage spills from backups, broken pipes, or blowback from cleanouts. If the waste is wet, just sprinkle Bio-Clean on the spill. If it is dry, pour generously into a mop bucket and use the mop as usual with no additional cleaners or chemicals.

### **CESSPOOLS AND SEPTIC TANKS**

Treat with one initial mixture of Bio-Clean (1 lb. mixed with 2 gallons of warm water for each 500 gallons) for up to a 2,000 gallon tank size. Over 2,000 gallons, use 1 lb. for each additional 1,000 gallons and divide the amount into 2 or 3 parts. Allow a day or two to pass between applications. Mix the Bio-Clean with warm water and allow to sit for 45 minutes, but no longer than one hour, before application. After initial treatment of tank, reapplication will not be necessary, provided the building drains are given periodic maintenance treatments. Otherwise, use initial treatment twice per year. NOTE: If there is crust, the tank should be pumped first. If the tank has build-up, but no crust, the initial amount of Bio-Clean should be doubled for faster results. Cesspools require twice the Bio-Clean maintenance amount.

### **CLOGGED PIPES**

**NOTE:** If the pipe is already clogged, run a snake to get it flowing first and then begin the program. Let the Bio-Clean and warm water stand for 45-60 minutes before applying, but **do not let it stand for longer than 60 minutes**. Flush the floor drain with clean water before applying the Bio-Clean. After the 5 day program (see chart below), use the Bio-Clean mixture once or twice per week to clean out the floor drain. It will take approximately 1 to 4 weeks to clean the pipes completely. If the pipe length is longer than shown in the following instructions, add up the extra length, and, according to the instructions, add this amount through a clean pipe in or at the beginning of the extra length. If this is not possible, double or triple the amount of water used to flush the bacteria out into the pipe.

Diameter of Pipe	Pipe Length	Apply Bio-Clean for 5 consecutive days
4″	25-100′	6 tbsp. in 1/2 gal. of warm water
	101-300′	1 lb. in 2 gals. of warm water
6″	25-100′	10 tbsp. in 1 gal. of warm water
	101-300′	1.5 lbs. in 3 gals. of warm water
8″	25-100′	1/2 lb. in 1 gal. of warm water
	101-300′	2 lbs. in 5 gals. of warm water
10″	25-100'	1 lb. in 2 gals. of warm water
	101-300′	3 lbs. in 8 gals. of warm water

### **GARBAGE DISPOSALS**

Mix 2 tablespoons of Bio-Clean with 2 pints of warm water. Turn on garbage disposal, then pour in mixture and turn off quickly. Treat the disposal daily.

### **RESIDENTIAL SEWAGE LAGOONS**

Bio-Clean is also effective for sewage lagoons. By digesting the organic waste, it eliminates odors and dramatically prolongs the life of the lagoon. Dosages vary greatly and are based on the area and depth of the lagoon, the amount of waste involved, water temperature and amount of dissolved oxygen present. After gathering this information, contact your Bio-Clean representative for a treatment plan.

# Uses for Bio-Clean®

Mix Bio-Clean with warm water before pouring it down the drain.

### **Residential Applications,** cont

### **SHOWER DRAINS**

Mix 2 tablespoons of Bio-Clean with 1 quart of warm water and treat for 5 straight days. Then mix 2 table-spoons of Bio-Clean with 1 quart of warm water and treat once a week after the initial 5 day treatment.

#### SINKS

Mix 2 tablespoons of Bio-Clean with 1 quart of warm water and treat for 5 straight days. Then mix 2 tablespoons of Bio-Clean with 1 quart of warm water and treat once a week after the initial 5 day treatment.

### TOILETS

Mix 2 tablespoons of Bio-Clean with 1 quart of warm water and treat for 5 straight days. Then mix 2 tablespoons of Bio-Clean with 1 quart of warm water and treat once a week after the initial 5 day treatment.

### **Food Service Applications**

### **BAR SINKS**

Mix 1 tablespoon of Bio-Clean with 1 pint of warm water and treat for 5 consecutive days, then repeat once per week.

### **BEER AND POST MIX OVERFLOW DRAINS**

Mix 1 tablespoon of Bio-Clean with 1 pint of warm water and treat for 5 consecutive days, then repeat once per week.

### DISHWASHERS – High Temp or Low Temp

If sanitizers, chlorinated products, caustics, germicidals, or acids are not being used, do not worry about removing floating solids from the top of the grease trap. If running two shifts, treat at the beginning of the down shift. For 24 hour operations – if it is impossible to treat overnight or for at least 6-8 hours, choose a 4-hour period when the drain will not be used. Mix the required amounts of Bio-Clean and water 45 minutes ahead of non-use period. When 45 minutes is up, stir thoroughly and pour into drains. **Do not allow mixture to set any longer than 60 minutes.** 

### Hi Temp Dishwashers with Grease Trap

**Dishwashers with grease traps – 5 gals. to 20 gals.** Small traps are very ineffective in trapping grease from dishwashers because the hot water keeps the grease in liquid form and it solidifies downstream after the trap, when it has cooled. Do not treat the trap. Apply 1lb. of Bio-Clean mixed with 2 gallons of warm water to clean out the discharge side of the grease trap or to a clean out line in the line. Do this for 5 consecutive days, then repeat this once per week. **Dishwashers with large grease traps** – do not use a chlorinated detergent. Use a bio-degradable, non-chlorinated detergent. Sanitizing is accomplished by 180°F water. Chlorine in the detergent creates a condition in the trap which kills bacteria. To treat the trap, refer to the section on grease traps.

### Low Temp Dishwashers

All of these use a chemical sanitizer. The larger the grease trap and the smaller the volume of dishwasher, the greater the success will be in keeping the trap clean with Bio-Clean. Two things will help: first, use a bio-degradable, non-chlorinated dishwashing compound, and second, wait a minimum of 30 minutes after the dishwasher has been shut down for the day before adding the Bio-Clean. This allows the chlorine from the sanitizer to dissipate.

### **FLOOR DRAINS**

Flush out any chemical residue for 10 seconds with clear water before treating with Bio-Clean. For each floor drain, mix 1 tablespoon of Bio-Clean with 1 pint of warm water per inch of pipe diameter (example: 4" floor drain = 4 tablespoons mixed with 4 pints

# Uses for Bio-Clean®

Mix Bio-Clean with warm water before pouring it down the drain.

## Food Service Applications, cont

water). Pour this mixture down each floor drain. Repeat for 5 consecutive days. Thereafter, treat all heavily used drains daily and all others once per week. If it is impossible to treat the heavily used drains daily after the 5 day application, apply 8 tablespoons of Bio-Clean mixed with 1 gallon of warm water and treat once per week, preferably at the beginning of a non-use day.

### **GLASS WASHERS**

Mix 2 tablespoons of Bio-Clean with 1 quart of warm water and treat for 5 consecutive days, then treat once per week.

### **GREASE TRAPS**

To be done **one time only**. Repeat if necessary after a period of time. **Step 1:** Remove the scum and floating solids off the top of the grease trap. Mix 1 lb. of Bio-Clean into 3 gallons of warm water and pour it into the trap. If the grease trap is more than 50 gallons but no more than 100 gallons, mix 2 lbs. of Bio-Clean with 5 gallons of warm water. For grease traps over 100 gallons but under 1000 gallons, use 3 lbs. of Bio-Clean mixed with 6 gallons of warm water. **Step 2:** Sinks that empty into a grease trap – apply daily at end of day and allow to stand overnight. Remove the scum and floating solids off the top of the grease trap. Mix 1/2 cup of Bio-Clean with 1 gallon of warm water and pour it down the sink drain. For heavily used grease traps, mix 1-2 cups of Bio-Clean with 1-2 gallons of warm water.

### **POTATO PEELERS**

For each day the potato peeler is used, mix 2 tablespoons of Bio-Clean with 1 quart of warm water and pour in to treat.

### **RESTROOM DRAINS**

Mix 2 tablespoons of Bio-Clean with 1 quart of warm water for 5 straight days. Then mix 2 tablespoons of

Bio-Clean with 1 quart of warm water and treat once a week after the initial 5 day treatment.

#### **SELF CLEANING HOODS**

Mix 2 tablespoons of Bio-Clean with 1 quart of warm water and pour into the drain line in each corner of the hood daily.

### **SINK DRAINS**

Treat daily at the end of day. Mix 1 tablespoon of Bio-Clean with 1 pint of warm water and pour into each sink compartment that does not empty into a grease trap.

### **STEAM KETTLE FLOOR DRAINS**

Mix 3 tablespoons of Bio-Clean with 1/2 gallon of warm water and apply to each drain daily.

### WASHROOMS

**NOTE:** Flush all drains and sinks with water for 10-15 seconds to remove any residue of germicidals or sanitizers before treating with Bio-Clean. If a washroom gets used frequently, it may be necessary to double the amount of daily application. Turn off sink's or urinal's automatic flush. Mix 2 tablespoons of Bio-Clean with 1 quart of warm water and treat.

### **Medical Applications**

## AUTOCLAVE DRAINS, UROLOGY, HEMATOLOGY, HISTOLOGY, BACTERIOLOGY, MORGUE SINKS, ETC.

Mix 2 tablespoons of Bio-Clean with 1 quart of warm water and treat for 5 straight days. Then mix 1 tablespoon of Bio-Clean with 1 pint of warm water and treat every day after the initial 5 day treatment. **Morgue floor drains** should use 4 tablespoons of Bio-Clean mixed with 1/2 gallon of warm water for the 5 day treatment cycle, then use 1 tablespoon of Bio-Clean mixed with 1 pint of warm water every day after the initial 5 days.

# Uses for Bio-Clean®

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Mix Bio-Clean with warm water before pouring it down the drain.

### Medical Applications, cont

### HOSPITAL AND PHARMACY LABORATORY SINKS

**NOTE:** Flush all drains with water for 10-15 seconds to remove any residue of formaldehyde, germicidals, or sanitizers before applying Bio-Clean. Mix 2 tablespoons of Bio-Clean with 1 quart of warm water and treat for 5 straight days. Then mix 1 tablespoon of Bio-Clean with 1 pint of warm water and treat every day after the intial 5 day treatment. If a lab does a high volume of work, it may be necessary to double the amount of daily application. If labs are not used on a daily basis, they can be treated after use.

## **Other Applications**

### **GARBAGE CAN WASHERS**

Flush the drain with clean water for 10 seconds before applying Bio-Clean. Mix 2 tablespoons of Bio-Clean with 1 quart of warm water and treat daily.

### HAND SINKS

Mix 2 tablespoons of Bio-Clean with 1 quart of warm water and treat for 5 straight days. Then mix 2 tablespoons of Bio-Clean with 1 quart of warm water and treat once a week after the initial 5 day treatment.

### **MOP SINKS**

Flush out any chemical residue for 10 seconds with clear water before treating with Bio-Clean. Mix 1 tablespoon of Bio-Clean with 1 quart of warm water and treat daily.

### OUTHOUSES

Outhouses with holding tanks and cesspools should be treated like a septic tank according to their size. Since the micro-organisms must have moisture to work, waste should be kept wet by spraying periodically with clear water. Check the pH of the water supply to see if it is 7-8. If it isn't, adjust the pH to 7 by adding baking soda dissolved in hot water before mixing the water with Bio-Clean. Following initial treatment, thoroughly mix 1/2 lb . of Bio-Clean in 1 gallon of warm water and distribute over waste material once a month or if usage is high (like in camps or parks), treatment should be done once a week. If usage is medium, treat bi-weekly.

### **PIPES See Clogged Pipes**

### **ROOF VENTS**

To determine amount, divide the number of floors by 4. This number, times the vent pipe diameter in inches, equals the number of tablespoons for each of the 5 day initial treatments. Use one quart of water per tablespoon unless problem is in main sewer away from building, then double or triple the water. Mix dosage with water 1 hour ahead of treatment time. Start on bottom floor and work upward another floor every 7 days.

### **SEPTIC TANKS See Cesspools**

### SEWAGE AND SEWAGE SPILLS

Bio-Clean is perfect for sewage spills from backups, broken pipes, blowback from cleanouts, or restaurant grease on tile floors. If the waste is wet, just sprinkle Bio-Clean on the spill. If it is dry, mix generously with warm water in a mop bucket and use the mop as usual with no additional cleaners or chemicals.

### URINALS

Mix 2 tablespoons of Bio-Clean with 1 quart of warm water for 5 straight days. Then mix 2 tablespoons of Bio-Clean with 1 quart of warm water and treat once a week after the initial 5 day treatment.

### WATER HOLDING TANKS

Mix 2 tablespoons of Bio-Clean with 1 quart of warm water for 5 straight days. Then mix 2 tablespoons of Bio-Clean with 1 quart of warm water and treat once a week after the initial 5 day treatment.