

Frequently Asked Questions

Information from Phibro Microbial Home & Industrial Solutions

1. What is BioOne®?

BioOne is a bio-degradable, environmentally friendly solution for clearing stubborn build-up of organic matter to help prevent recurring blockages in residential and industrial pipes and drains. It is unlike other chemical- and biologicalbased products due to its broad spectrum microbial activity and thrives in any drain environment when used as directed on a routine basis.

2. Where can I buy BioOne?

BioOne is sold through wholesale plumbing distributors who sell direct to plumbers only. If you are interested in BioOne for your residence or facility, ask your local plumbing service professional for more information or contact us at <u>orders.osprey@pahc.com</u> to be put in contact with a plumbing distributor near you.

3. How is BioOne different from other drain cleaning products?

Unlike many other commercial drain cleaning products, BioOne is not spore based and contains no added enzymes. It instead employs specialized microbes to create a 100% live, vegetative, bacteria-based product. Bacteria consume, degrade and digest the fats, oils and grease (FOGs) and other stubborn organic wastes that build up in the drain line, turning them into harmless by-products, CO_2 (air) and H_2O (water). BioOne is a drain maintainer product that works to eliminate FOG buildup instead of relocating it.

4. Why use a live, vegetative, bacteria-based drain cleaning product like BioOne over a sporeor enzyme-based product?

	Spore- or enzyme-based drain cleaning products with surfactants	BioOne (100% live, vegetative, bacteria-based drain cleaning product
FOG buildup	Fats, oils and grease are temporarily liquified by surfactants before moving downstream, where they re-coagulate and solidify.	BioOne is formulated without surfactants – so the bacteria consume, degrade and digest the FOGs – eliminating them instead of relocating them.
Environmental conditions	Cannot perform at maximum capacity without ideal environmental conditions (alkali water temperature, pH levels, etc.).	Acclimates to perform consistently and effectively in its environment.
Drainpipe coverage	Gravity flow through the drain line system, so they can only clean what they touch.	A biofilm forms and coats the drain line system's interior surfaces.





5. How quickly can BioOne open a clogged drain?

It is important to remember: BioOne is a drain line maintainer, not a drain line opener. It will not open a drain line immediately.

6. Is BioOne a safe, environmentally friendly product?

Yes, BioOne is a safe, natural alternative to spore-based drain maintaining products. In fact, since 2003, we have partnered with the EPA Safer Choice Program to verify BioOne is an environmentally preferred product that is safer for human health and the environment; and we were named the EPA's Safer Choice Partner of the Year three years in a row (2015-2017). The purpose behind BioOne is to reduce harmful chemical usage and create a safer, more sustainable product, which aligns well with the EPA Safer Choice Program's mission. Through our participation in the EPA Safer Choice Program, consumers can be assured: BioOne is a safer option for their families, workplaces and our planet.

7. How is BioOne made?

BioOne is made from microbes produced under strict Good Manufacturing Practice (GMP) conditions. The bacteria formulated in BioOne are produced naturally through a controlled fermentation process.

Every batch is:

- Produced via processes similar to those used in commercial food production.
- Tested in Quality Control, at which time our scientists inspect for appropriate activity, contaminants, and to confirm bacteria counts meet our high expectations.

8. Is BioOne hazardous?

We are on a mission to provide the safest drain cleaning product because we believe in safer residents, safer staff and safer plumbers. According to the Globally Harmonized System (GHS), BioOne is a non-regulated and non-classified material. It also earns "0 ratings" from the National Fire Protection Association (NFPA) and on the Hazardous Materials Identification System (HMIS). That means BioOne has achieved the lowest possible hazard rating.

BioOne will not cause skin burns or eye damage, and is unlikely to cause cast iron corrosion, exothermic reactions, or other dangerous scenarios.

Safe for people, pipes, pets & planet[™]

9. Does BioOne come in different packaging sizes?

Yes. BioOne can be purchased in either 64 oz. or 2.5 gal. bottles, or a 30-day Auto-Dispensing System can be sourced for commercial applications. Larger packaging sizes are available upon request.

10. How many applications are in a 64 oz. bottle of BioOne?

One 64 oz. bottle supplies 32 applications at 2 oz. each, which is enough to provide proactive protection for eight drains or toilets over a four-month period.

11. Will BioOne freeze – and will the live bacteria become ineffective if frozen?

Yes, BioOne will freeze. This product should not be frozen, as doing so will reduce bacteria viability and diminish overall product effectiveness.

12. Can the live bacteria in BioOne withstand high temperatures?

The live bacteria found in BioOne can survive at temperatures up to 105° F. However, when high water temperatures and chemicals flow through the drain line system, many of the microbes will survive. That's because BioOne forms a biofilm that coats the drain line system's interior surfaces. Water and chemicals will only pass through the middle and bottom of a drainpipe.





13. How often should BioOne be applied?

We recommend you routinely replenish your drain line system with a fresh supply of BioOne to account for the normal turnover rate of microbes. Recommendations will vary by application site. For recommended uses, refer to the instructions on the bottle or on <u>BioOneSolutions.com</u>.

In a standard preventative maintenance application, we recommend pouring 2 oz. of BioOne down every drain or toilet, once per month. In applications where drain lines are draining slowly, we recommend pouring two ounces of BioOne down the problem drain once per day for five consecutive days, or until the drain line begins to flow freely.

In larger facilities where vent stacks are being treated for preventative maintenance, we recommend applying one gallon of BioOne per vent stack, once per month.

If used as recommended, BioOne can help provide continuous free-flowing drain lines.

14. What pH range does BioOne require? Is it necessary to add a pH neutralizer before using BioOne?

BioOne works optimally in a water pH range of 5-9. Therefore, it is unnecessary to pretreat the drain line system with a pH neutralizer before using BioOne.

15. How does BioOne work?

In a standard application, one 2 oz. application of BioOne deploys 6 billion live bacteria. In the presence of air, food source and water, those microbes begin to activate and multiply. The number of bacteria will double about every 20 minutes. BioOne forms a biofilm that coats the drain line system's interior surfaces. The live bacteria degrade and digest FOGs and other stubborn organic wastes, turning them into harmless by-products, CO₂ (air) and H₂O (water). After FOG buildup clears and with routine application, the microbes continue working to keep the drain line system free flowing.

16. When is the best time to apply BioOne?

Retention time is key to BioOne's performance, so it should be applied at a time when the drain(s) or toilet(s) will not be in use. For residential applications, we recommend pouring it down the drain(s) or toilet(s) before bed, on your way out the door for work, in the evening, or before leaving for vacation. For commercial applications, we recommend using BioOne after business hours.

17. Does BioOne break down hair?

No, BioOne does not break down hair caught in a drain line – but it does break down the FOGs that cause hair to bind and become lodged in a drain line. By eliminating the FOGs in a drain line, hair will successfully pass through, allowing for a free-flowing drain line system.

18. Where can I use BioOne?

BioOne can be applied to any drain or toilet in residential or commercial settings.

19. Is BioOne recommended for restaurant applications?

BioOne is recommended for restaurants because it can help prevent drain backups and eliminate offensive odors, and rid the kitchen and bar drains of typical organic build up. Each of these hazards can have business and customerfacing ramifications. Drain backups can cause potentially hazardous conditions from wet, slick floorings. FOG build up in drain lines and grease traps can emit offensive odors.





20. What prep work is involved before using BioOne?

None. BioOne is a ready-to-use liquid product – no mixing or waiting required. The 64 oz. bottle's tip-and-pour tank and measuring cup are integrated into the packaging design, making it easy to measure out each application.

21. How does the BioOne Auto-Dispensing System work?

The BioOne Auto-Dispensing System provides 24/7 drain protection by automatically applying BioOne at set intervals directly into the drain line, leading into the grease trap. BioOne Auto-Dispensing Systems are ideal for the harsh conditions of commercial kitchen environments.

22. Who typically uses BioOne?

Anyone can use BioOne. It is approved for household, industrial and institutional use in any outbound line in your residence or facility. This includes drainpipes, grease traps, grease interceptors, septic tanks and more.

BioOne has been used in:

- Airports
- Apartment complexes/condominiums
- Automotive service centers
- Convention centers/exhibition halls
- Cruise ships
- Hospitals
- Hotels
- Jails/prisons
- Janitorial services
- Manufacturing plants
- Medical labs/imaging facilities

- Movie theaters
- Nursing homes
- Pet groomers
- Residential septic systems
- Restaurants
- RV/trailer parks
- Schools
- Shopping malls
- Supermarkets
- Wastewater treatment plants

To learn more about BioOne, talk with a Phibro expert at 1-800-223-0434 or visit *www.BioOneSolutions.com*

This information has been prepared for industry professionals.