



## One Biotechnology's Simply Superior Bioproducts™ Most-Commonly-Asked Questions

### 1. *What is Liquid BioOne®?*

Liquid **BioOne**®'s formulation is patented and therefore unique in the industry. It contains no added enzymes, relying on the powerful action of its performance-ready, live vegetative microbes to degrade and digest fats, oil, grease, and other stubborn organic wastes to harmless by-products and water. The microbes in Liquid **BioOne**® are formulated to withstand and flourish even in the harsh conditions of commercial kitchens, making it the ideal bioproduct for grease trap maintenance. Liquid **BioOne**® is performance ready—NO MIXING and NO WAITING required—so residential and commercial customers routinely use more product with greater results. Liquid **BioOne**® is the premier drain line product in the country.

### 2. *Do the live bacteria in BioOne® die off in the bottle? How do the bacteria survive without consuming each other?*

Aaahhh...the beauty of a patent! Liquid stabilization of **BioOne**®'s microorganisms is just one of the patents that protect the formulation. But to understand what this stabilization process does, compare it to the hibernation of a grizzly bear. The bear's metabolic functioning slows down dramatically to the point that no food is needed. When the resting state is ended, that bear is ready for an all-you-can-eat buffet. In the case of Liquid **BioOne**®, when you dose product into a wastewater system, the live microbes are immediately ready to eat, digest, and consume grease, oil, fat, and stubborn organic matter found in every drain pipe, septic system, and grease trap.

### 3. *Does Liquid BioOne® freeze? Does freezing affect the effectiveness of BioOne®'s microorganisms?*

Like PVC glues and other liquid products carried on service trucks, Liquid **BioOne**® will freeze but freezing in no way affects the viability and effectiveness of the microbial activity. In fact, the microbes in Liquid **BioOne**® are actually freeze-dried before being formulated into the liquid state.

### 4. *Does Liquid BioOne® degrade hair?*

The microbes in Liquid **BioOne**® will eventually degrade hair, but the process is slow because of the strength of the protein contained in hair. How Liquid **BioOne**® handles hair clogs is very simple: **BioOne**®'s microbes eat and remove the drain line buildup that hair clings to, and once the buildup is removed, hair moves freely through the line.

### 5. *Does Liquid BioOne® have a scent?*

There are no perfumes in Liquid **BioOne**®, it has a natural, earthy scent.

### 6. *How long is Liquid BioOne®'s shelf life?*

Although the microbes in Liquid **BioOne**® stay viable for years, peak product effectiveness is 18 months. Naturally, shelf life is insignificant because **BioOne**® users don't hold on to inventory that long. End users find Liquid **BioOne**® so easy to use that they regularly consume more product on a routine basis—keeping their drain line systems free of organic buildup.

**7. How many applications are in the residential 64oz. bottle?**

There are 32, two-ounce applications in each 64oz. residential-size bottle of Liquid **BioOne**®.

**8. How does Liquid BioOne® perform in commercial kitchen drain lines and grease traps?**

Liquid **BioOne**® is specially formulated to adapt to the harsh conditions of commercial kitchen drain lines and grease traps. There is no down time with Liquid **BioOne**®; the performance-ready activity of **BioOne**® means every minute the product is in the system, grease, oil, and fats, as well as other stubborn organic matter, are being eaten, digested, and consumed. The exclusive Liquid **BioOne**® auto-dispensing system is ideal for all commercial kitchen environments, dosing **BioOne**® at set intervals into the main line directly leading into the grease trap—providing the customer with 24-hours a day/7 day a week. Typically a trap treated with Liquid **BioOne**® can see a normal reduction of necessary pumping by as much as 50%.

**9. What temperature range can the microbes in Liquid BioOne® withstand?**

Liquid **BioOne**®'s microbes can survive in continuous temperatures as high as 105 degrees, the normal operational range found in commercial kitchens. When wastewater enters the system that exceeds this temperature, many of the organisms will survive because **Liquid BioOne**® forms a biofilm around the entire surface of the pipe. High water temperatures and chemicals flowing through the drain line do not fill the entire pipe but rather flow along the middle and bottom of the line. In the commercial kitchen setting the Liquid **BioOne**® auto-dispensing system provides for the normal turnover rate of microbes in these types of settings by continuously replenishing a fresh supply.

**10. What pH range do the microbes in Liquid BioOne® require, and is it necessary to add a pH neutralizer to a grease trap or septic system before dosing with Liquid BioOne®?**

When using Liquid **BioOne**® it is unnecessary to pretreat a septic or grease trap system with pH neutralizer. Liquid **BioOne**® is formulated to perform in very harsh environments, including lower or higher pH ranges. Liquid **BioOne**®'s microbes will degrade fats, oils, grease, and organic waste in a pH range of 5-9.

**11. Is Liquid BioOne® in compliance with national and local ordinances?**

Yes. A big concern that municipalities have is liquefying or emulsifying fats, oils, and greases that simply push the problem down the line to the city. Liquid **BioOne**® contains NO ADDED ENZYMES OR SOAPS. Enzymes change the physical state of a compacted solid buildup to a loose solid allowing grease and organic matter to flow directly to the wastewater treatment plant where it has to be biotreated before it can be reintroduced into the environment. Soaps emulsify fats, oils, and greases. Emulsified grease and oils require bioremediation at the municipality, and that's very expensive. That expense is often transferred back to the commercial customer in the form of surcharges.

Liquid **BioOne**® eats, digests, and consumes grease, oil, fats, and organic matter by degrading it into harmless carbon dioxide and water. All municipalities across the country will allow Liquid **BioOne**® to be introduced into commercial wastewater systems. Offering Liquid **BioOne**® to your commercial customers will allow them to avoid potentially expensive wastewater surcharges.