

# ClearKill

## Use In:

- Petroleum Distillate Fuels (#2 Diesel, Kerosene, Gasoline)
- Biofuels & Synthetic Fuels

## Benefits

What benefits will users experience with ClearKill?

1. Broad-spectrum kill of bacteria, fungi and other microbes commonly found to contaminate fuel and fuel systems
2. Provides unique corrosion protection for fuel system components
3. Effective in both fuel and water phases
4. Sulfur-free (does not contribute to sulfur levels in the fuel)
5. Long-lasting effectiveness in fuel systems
6. Suitable for use in gasoline and diesel storage tanks

## Questions For Customers

Ask these questions to determine if your customers and prospects need to treat with a biocide:

### Q. Are you having any of these symptoms or problems with your fuel or your equipment running on that fuel?

- Clogged fuel filters (especially recurring clogging)
- Water presence or detection in the storage tank
- Unusual spike in fuel consumption
- Discolored or hazy fuel
- Foul odor from fuel or tanks
- Excess black smoke during engine operation
- More frequent injector cleaning or replacement

*Note: The first two are the strongest indicators of microbial contamination. The rest support the diagnosis.*

## Questions From Customers

Answers to common questions customers may pose about ClearKill and biocides.

### Q. Why do I need a biocide if I have a microbe problem?

A. Because microbes will not go away on their own. A biocide like ClearKill is the only reliable way to kill microbial contamination in fuel and fuel systems.

### Q. If I have a microbe problem, can I fix it by just removing the water?

A. No. Removing water only removes the environment that supports active growth. The microbes go dormant—but they'll return when water reappears. A biocide is required to kill them.

### Q. Can I add ClearKill directly to a vehicle's fuel tank?

A. It's not recommended. Instead, dose ClearKill into a smaller container with fuel and pour that into the vehicle's tank to ensure better mixing and legal compliance.

### Q. How long does ClearKill last in the fuel?

A. ClearKill remains active and effective in fuel for up to 4 weeks—offering long-term protection during and after treatment.

### Q. How often should I treat my fuel with ClearKill?

A. One shock treatment is typically enough to kill contamination. Use microbial monitoring to determine future treatment intervals.

### Q. How should I apply ClearKill for best results?

A. See treatment tips below. For best results, ensure good mixing into the fuel. Pair with **Tank Treatment SDF** if biomass is present.

## Treatment Tips & Recommendations

1. Use Shock Dosage to eliminate active microbial problems.
2. Conduct microbial monitoring testing every 1-3 months to monitor microbial levels and help guide decision making to when to re-treat.
3. After treatment, expect to replace clogged filters as dead microbes and microbial biomass are flushed out. It is recommended to wait 24 hours before using the fuel. This allows time for dead microbes to settle at the bottom of the tank.
4. If microbial biomass is also present, recommend combined treatment with **Tank Treatment SDF + ClearKill**.

It is important to remember, resolving emulsified fuel is as much of an "art" as it is a "science". It is important to pay attention to results (i.e. comparing before and after samples for visual clarity) and be prepared to adjust accordingly.

## Treat Ratios: How much to use?

The standard Shock Dosage is 1 oz per 40 gallons of fuel (approx. 200 ppm v/v). Some heavily contaminated systems may require a higher dose or follow-up dosing, though this is true of any other biocide chemistry to be used in the marketplace. Microbial testing, such as ATP-By-Filtration, may be used to confirm satisfactory remediation of microbial levels or any need for follow-up treatment.