



# BELLICIDE

## **BIOCIDE AND PRESERVATIVE FOR DIESEL, BIODIESEL, CRUDE OIL, FUEL OIL AND OTHER FINISHED FUELS**

### **KILLS MICROBES COMPLETELY IN AS LITTLE AS TWO HOURS AND MAINTAINS EFFECTIVE KILL RATE IN FUEL FOR UP TO 4 WEEKS**

**BELLICIDE** is a solvent-based preservative used to eliminate and prevent the growth of microbes, bacteria and fungi in finished fuels (diesel, biodiesel, gasoline, bunker C, etc.) **BELLICIDE** is also used to prevent the microbe-induced biodegradation of both petroleum and bio-feedstock oils and fats during storage.

### **WHAT WILL BELLICIDE DO FOR YOU?**

- Protects stored fuel quality by killing all common fuel bacteria, fungi and microbes (Sometimes referred to as 'Algae')
- Partitions into both fuel and water phases for maximum treatment activity and effectiveness
- Achieves 100% bacterial kill in just two hours
- Continues killing fuel microbes for up to four weeks
- Safe for ULSD fuels

**BELLICIDE** is solvent-based and fully combustible, and will not form combustion residues or hazardous by-products when used.

**BELLICIDE** is non-corrosive, non-emulsifying, and has no long term stability concerns.

## **RECOMMENDED TREAT RATES**

**Shock Dose:** Contaminated systems should be treated with 2.5 fluid ounces per 100 gallons of fuel (200 ppm) (Ratio: 1:5000).

**Maintenance Dose:** Add **BELLICIDE** to the fuel at a rate of 1.25 fluid ounces per 100 gallons of fuel (100 ppm) (Ratio: 1:10,000)

**BELLICIDE** imparts less than 1.5 ppm sulfur to the fuel, which is well below the ULSD standard.

### **WHO SHOULD USE BELLICIDE?**

If you store any kind of petroleum or biofuels and need to protect fuel from the destructive effects of fuel-borne microbes, **BELLICIDE** is what you need.

Ideal users and uses of this product would include:

- Anyone storing diesel, biodiesel, ethanol-blended gasoline and other petroleum fuels
- Stored fuel users with a water phase in their fuel storage tank
- Stored fuel users experiencing increases in filter plugging
- Fleets and municipalities storing fuel for business use
- Stored fuel users in humid environments, including marine users
- Fuel distributors who need to prevent transmission of fuel microbial contamination to their customers

**Powers Guaranteed Generators**

**Serving New England since 1995 tel (800) 853-7202 | [www.powersgenerator.com](http://www.powersgenerator.com)**

## SIZE AVAILABILITY

**BELLICIDE** is packaged in 16 fluid ounce bottles as well as 1-gallon jugs and 55-gallon non-returnable drums. All product sizes are shipped by LTL freight carrier.

## APPLICATION RECOMMENDATIONS

**BELLICIDE** works best when well-mixed into fuel. To ensure optimal blending of fuel and treatment, direct injection and fuel circulation are the recommended best practices. In applications where fuel circulation is not possible, it is recommended to splash-blend **BELLICIDE** by adding treatment, then adding new fuel on top.

If possible, wait 8 hours after treatment and fuel circulation before using treated fuel, to allow for settling of dead microbial biomass. It is recommended to have extra filters on hand during treatment.

## HANDLING AND STORAGE GUIDELINES

Refer to Material Safety Data Sheet for suitable materials of construction for handling and storing this product. Improper handling of this product can be injurious to workers.

Observe all safety precautions shown on the label and in the Material Safety Data Sheet.

**BELLICIDE** is not approved for use in aviation fuels.

## COMPARATIVE TESTING

**BELLICIDE** was tested in the laboratory using two common strains of fuel-borne microbe to compare its effectiveness versus other leading fuel oil biocides. The results of the study show **BELLICIDE** providing excellent results at the minimum recommended dose after both one and four weeks. These results showed to be equal to or greater than the results obtained by the other two microbicides.

## ACTIVE INGREDIENTS:

2-(Thiocyanomethylthio)benzothiazole..... 2.5%  
Weight per U.S. gallon.....9.6lb  
Methylene bis(thiocyanate) ..... 2.5%

**INERT INGREDIENTS**.....95.0%  
(Contains Petroleum Distillates)

## PHYSICAL PROPERTIES:

Weight per U.S. gallon ..... 8.6 lb  
Density at 25°C (77°F) ..... 1.03 g/cm3  
pH (100 ppm in water) ..... 6–7  
Flash point ..... 70°C (158°F)

Figure 1. 100 ppm versus *P. aeruginosa*

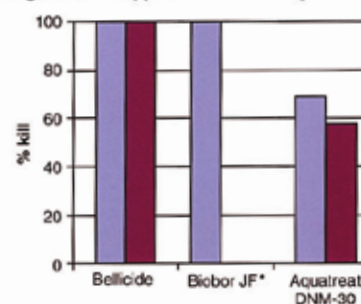
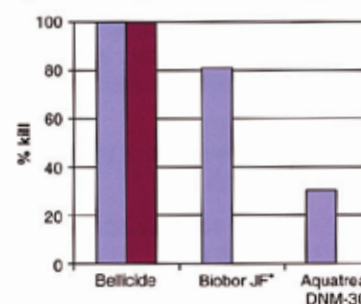


Figure 2. 100 ppm versus *C. resinae*



1 week 4 weeks

\*Biobor is a registered trademark of Hammonds Fuel Additives, Inc. Aquatreat is a registered trademark of Akzo Nobel Chemicals Ltd.



(Authorized Retailer for Bell Performance Products)

**Powers Guaranteed Generators**

Serving New England since 1995 tel (800) 853-7202 | [www.powersgenerator.com](http://www.powersgenerator.com)