

# BELLCIDE

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

**KILLS MICROBES COMPLETELY IN AS LITTLE AS TWO HOURS**

**EFFECTIVE AT KILLING MICROBES IN FUEL FOR UP TO 4 WEEKS OR MORE**

- **Broad spectrum biocide**
- **Solvent based**
- **Water dispersible**
- **ULSD approved**

BELLCIDE is a solvent-based preservative used to eliminate and/or prevent the growth of bacteria and fungi in finished fuels (diesel, biodiesel, gasoline, bunker C, etc.)

BELLCIDE is also used to prevent the biodegradation of crude, refined, and feedstock oils and fats (e.g. poultry, soybean, aromatic, paraffinic, naphthenic) during storage.



**BELL**  
PERFORMANCE

We Made It First. We Make It Best.



## PRODUCT BENEFITS

- Broad spectrum: kills bacteria, fungi, and algae
- Active in both phases of the system: partitions into both fuel and water
- Fast acting: 100% bacterial kill in just two hours
- Long lasting: Continues killing fuel microbes for up to four weeks or more

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

BELLCIDE is non-corrosive, non-emulsifying, and has long term fuel stability.

## RECOMMENDED TREAT RATES

BELLCIDE should be added to the fuel at a rate of 1.25 fluid ounces per 100 gallons fuel (100ppm); 0.50 fluid ounces per 40 gallons of fuel.

Contaminated systems should be treated with 2.5 fluid ounces per 100 gallons fuel (200 ppm); 0.50 fluid ounces per 20 gallons of fuel.

At the maintenance dose of 1.25 ounces per 100 gallons, BELLCIDE imparts a minimum amount of sulfur to the fuel.

## SIZE AVAILABILITY

**BELLCIDE** is packaged in 16-oz bottles as well as 1-gallon jugs and 55-gallon non-returnable drums.

## HANDLING AND STORAGE

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 Safety Data Sheet.

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

## COMPARATIVE TESTING

**BELLCIDE** was tested in the laboratory to compare its effectiveness versus two other leading fuel oil biocides.

The micro-organisms used in the study were the bacterium *Pseudomonas aeruginosa*, and the fungus *Cladosporium resinae*, both of which are widely found in fuel.

The results of the study show **BELLCIDE** 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%
Methylene bis(thiocyanate) .....	2.5%
Inert ingredients .....	95.0%

Figure 1. 100 ppm versus *P. aeruginosa*

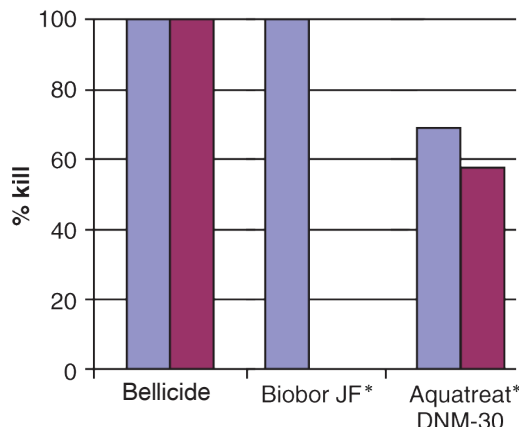
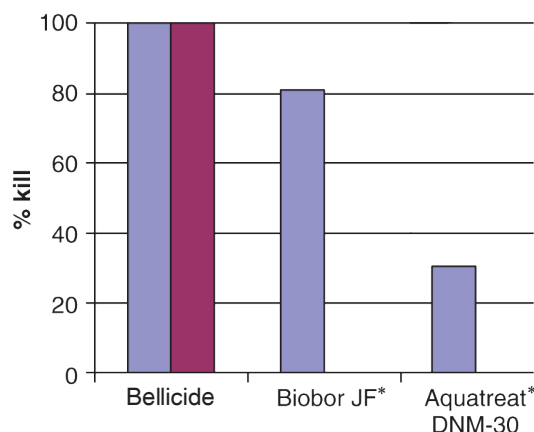


Figure 2. 100 ppm versus *C. resinae*



■ 1 week ■ 4 weeks

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

### Physical Properties

Weight per U.S. gallon .....	8.6 lb
Density at 25°C (77°F) .....	1.03 g/cm <sup>3</sup>
pH (100 ppm in water) .....	6—7
Flash point .....	70°C (158°F)

Seller warrants that this product conforms to its chemical description and is reasonably fit for the purpose referred to in the directions for use when used in accordance with the directions under normal conditions. Buyer assumes risk of any use contrary to such directions. Seller makes no other warranty or representation of any kind, express or implied, concerning the product, including NO IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS OF THE GOODS FOR ANY OTHER PARTICULAR PURPOSE. No such warranties shall be implied by law and no agent of seller is authorized to alter this warranty in any way except in writing with a specific reference to this warranty. The exclusive remedy against seller shall be a claim for damages not to exceed the purchase price of the product, without regard to whether such a claim is based upon breach of warranty or tort. Any controversy or claim arising out of or relating to this contract, or breach thereof, shall be settled by arbitration in accordance with the commercial arbitration rules of the American Arbitration Association, and judgement upon the award rendered by the Arbitrator(s) may be entered in any court having jurisdiction therefore.