



## BioGuard™ ULS Fuel Biocide

BioGuard™ ULS (BGDULS) Fuel Biocide is an EPA registered, fuel & water soluble, dual phase microbiocide that effectively kills bacteria, fungi & other microorganisms that grow in diesel fuel, biodiesel blends and heating oil storage tanks. It also helps prevent fuel system contamination from new growth. BioGuard has an industry leading kill time of 2-3 hours.

**Untreated diesel fuel is highly susceptible to bacterial growth which can lead to clogged filters/injectors and reduce the combustibility of diesel fuel.**

BioGuard can kill existing bacteria colonies and be used in association with ValvTect's Tank Maintenance Program as a proactive way to address biological contamination before it causes maintenance issues.



### UNRESOLVED CONTAMINATION CAN LEAD TO:

- **Filter and fuel line plugging.**
- **Sludge and slime buildup in system components.**
- **Corrosion & premature breakdown of system components.**
- **Costly equipment down time.**

### BIOGUARD IS GREAT FOR USE IN

Agricultural & Farming Equipment • Truck Fleets • Industrial Applications  
Marine • Home Heat • Backup Power • Railroad Storage Tanks

### APPLICATIONS

BioGuard is effective at controlling the growth of bacteria & other microorganisms that breed in all types of diesel fuel. These microorganisms threaten the integrity of diesel fuel which can lead to costly downtime and repairs. **Typical applications include truck fleets, farms, home heat, marine, backup power, railroad and all other on-road or off-road applications.**

### BLENDING RECOMMENDATIONS

*BioGuard can be added to the fuel in bulk storage tanks or directly into equipment fuel tanks.*

KILL TREATMENT RATIO	
BioGuard	Fuel
1 oz	28 gal
16 oz	460 gal
32 oz	920 gal
1 gal	2,500 gal

MAINTENANCE TREATMENT RATIO	
BioGuard	Fuel
1 oz	58 gal
16 oz	920 gal
32 oz	1,840 gal
1 gal	7,400 gal

**NOTE:** Store BioGuard at a temperature above 70°F to avoid solidification of additive. If solidification does occur, bring BioGuard back up to temperature above 70°F before adding to fuel. This does not affect the efficacy of the product.



## **BLENDING RECOMMENDATIONS CONTINUED**

**Initial Treatment:** To kill existing microorganisms & for best results, remove water bottoms from fuel storage tanks. Add the proper amount of BioGuard™ ULS directly to the tank that is at least ½ full of fuel. Completely fill tank with fuel. Allow 2 hours or more before using. Check filters frequently for residue & change as necessary.

**Maintenance Treatment:** Continue to treat subsequent fuel loads with BioGuard™ ULS at the maintenance dosage. Continue to check filters and keep fuel free of water. BioGuard™ can be used at concentrations between 1:1000 and 1:7400 (135ppm & 1000ppm). To prevent microorganism growth, continuously treat all fuel deliveries with BioGuard™ ULS at the maintenance treatment dosage & keep fuel systems free of water.

## **SAFETY PRECAUTIONS**

When handling this product, persons should exercise caution and wear protective goggles, gloves and clothing. See cautions indicated in the corresponding Safety Data Sheet before handling and storing this product.

## **WARRANTY**

We guarantee this product to comply with our published specifications. Since the use of this product is beyond our control, we disclaim responsibility for its performance, handling, use, storage, the results obtained, or any injury of any nature resulting there from. Product warrantee and seller's obligations apply only to replacement of product. Seller assumes no liability for any claim or loss of any other kind. In no event shall seller be liable for indirect punitive, special or consequential damages or expenses. Any warrantee claim shall be governed by and construed in accordance with the laws and jurisdiction of the State of Illinois.

## **TYPICAL SPECIFICATIONS**

BioGuard Color (ASTM D1544)	Yellow
Specific Gravity @ 68° F (ASTM D891)	1.098
Density, lbs./gal. (Calculated)	9.14
Flash Point °F, TCC (ASTM D3278)	288
Additive Pour Point °F (ASTM D97)	70°F

**NOTE:** The sulfur content of this fuel additive does not exceed 15 ppm.

## **AVAILABLE PACKAGING**

- 250 gal totes
- 55 gal
- 5 gal
- 1 gal
- 12/32 oz
- 12/16 oz