



BIOGUARD™ ULS (BGDULS)

FUEL BIOCIDES

Microorganisms, like bacteria, yeast and mold are known as “bugs.” “Bugs” live in virtually all diesel fuel systems. Wherever there is moisture and fuel together there is a good environment for biological growth. The most common places for contamination include the fuel/water interface near tank bottoms, on storage tank walls, and in tank bottom sediment. Microorganisms live in the water found in all fuel systems and eat the fuel as a nutrient source. Sulfur provides some natural protection against bacteria growth. However, with the introduction of ULSD fuels, there is minimal natural protection to prevent biological growth in fuel systems. Left unchecked, “bugs” will corrode fuel systems and create slime & sludge that plug fuel filters and fuel lines. The result is increased maintenance costs and expensive down time.

BioGuard™ ULS is an EPA registered, fuel & water soluble, dual phase microbiocide that effectively kills bacteria, fungi & other microorganisms that grow in gasoline, diesel fuel, biodiesel blends and heating oil storage tanks. It also helps prevent fuel system contamination from new infections.

BioGuard™ ULS can be used in association with ValvTect's Tank Maintenance Program as a proactive way to check your fuel system for bacteria contamination and address excess water & biological contamination before it causes maintenance issues. Please note storage requirement: Due to the higher additive pour point, please keep above 70F to prevent solidification. If solidification occurs, gently warm the product above its melting point of 70F. The efficacy of the product is not affected by solidification or reliquification.

FEATURES AND BENEFITS

- Kills bacteria (“bugs”), yeast, mold, and other microorganisms.
- Kills bacteria in the fuel and water phase.
- Works faster & more effectively (as little as 2-3 hours).
- Prevents bio-contamination of fuel system.
- Prevents bacteria caused filter and fuel line plugging.
- Prevents and breaks up bacteria caused sludge and slime.
- Prevents bacteria caused corrosion.
- Prevents equipment down time.
- Effective in gasoline, diesel, biodiesel blends, & heating oil.
- Safe for use in on-road and off-road fuels.
- Kill Treat Rate 1:2500, Maintenance Treat Rate 1:7400
16 oz bottle treats 460 gallons at kill treat rate and up to 920 gallons for maintenance dosage.
32 oz bottle treats 920 gallons at kill treat rate and up to 1840 gallons for maintenance dosage.



PRODUCT DATA SHEET

BIOGUARD™ ULS FUEL BIOCIDES (BGDULS)

APPLICATIONS

BioGuard™ ULS is effective in controlling the growth of bacteria & other microorganisms that breed in all types of diesel fuel, biodiesel blends, gasoline and water which cause formation of slime, sludge and acids. Typical applications include truck fleets, farms, home heat, marine, power generation, railroad and all other on-road or off-road applications.

BLENDING RECOMMENDATIONS

Product should be added to the fuel in bulk storage tanks or directly to the equipment fuel tanks.

Container Size	Initial Treatment (Kill rate)	Maintenance Treatment
1 gallon	1 gallon to 2500	1 gallon treats up to 7400 gallons
55 gallons	1 gallon to 2500	1 gallon treats up to 7400 gallons
16 oz.	1 oz. to 28 gallons	1 oz. to 58 gallons
	16 oz. treats 460 gals	16 oz. treats up to 920 gallons
	32 oz. treats 920 gallons	32 oz. treats up to 1840 gallons

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

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

PACKAGING

Available in 250 gal. totes, 55 gal., 5 gal., 2/1 gal. 12/32 oz. and 12/16 oz. containers.

