# **AMERGY® ULS-D**



#### **DESCRIPTION**

AMERGY ULS-D ultra-low sulphur fuel oil detergent, is formulated with the latest generation of injector deposit and corrosion control additive technology. AMERGY ULS-D detergent minimizes fuel injection equipment deposits including metallic deposits originating from the use of ultra-low sulphur fuel oil and fuels contaminated with ULO (used lube oil) and biodiesel components. AMERGY ULS-D ultra-low sulphur detergent is significantly more effective in keeping fuel injection equipment free from deposits and corrosion when compared to existing detergent packages found in the marine market today.

The combination of tighter clearances and tolerances in fuel injection equipment and the overall quality of ultra-low sulphur fuel oil increases fouling particularly in medium speed and high-speed diesel engines. With increased popularity and widespread adoption of biodiesel as a source of zero sulphur fuel, use of ultra-low sulphur fuel oil, containing as little as 1-5% biodiesel components, increases the likelihood of fuel injection equipment fouling. In addition, dissolved metals such as zinc and copper, sometimes also found in biodiesel and ULO components, will exacerbate the extent of fuel injection equipment fouling.

Fouling of diesel fuel injectors can occur over time or relatively quickly. Under certain conditions it causes significant problems such as loss of power, increased fuel consumption, corrosion, and increased exhaust emissions. With extreme fouling conditions, the fuel injectors may remain open and cause fuel to leak into the environment, resulting in oil pollution and fines.

The advanced formulation in AMERGY ULS-D detergent removes any existing fuel injector deposits and maintains internal fuel injection equipment clean and free from deposits and corrosion. AMERGY ULS-D detergent restores power, improves fuel consumption, reduces corrosion, and reduces exhaust emissions through better atomization and combustion. AMERGY ULS-D detergent is suitable for all engine types and all fuel grades where fuel injection equipment deposits are a problem. AMERGY ULS-D detergent handles contaminated fuels with ULO and/or biodiesel components to prevent the formation of metal soap deposits.

#### **APPLICATION & USE**

Drew Marine recommends that fuel deliveries are representatively sampled and analyzed. This enables monitoring of overall fuel quality to determine properties that may lead to fuel handling and/or combustion issues. Consult your local Drew Marine representative for further discussion on fuel sampling equipment and fuel analysis services.

The dosage rate will vary depending on the application. Initial treatment is recommended to remove existing deposits followed by maintenance treatment dosage rates.

#### **FEATURES**

- Contains advanced detergent additives to handle internal diesel injector deposits
- · Completely soluble in fuel oil
- Will not separate / settle out
- Anti-corrosion performance
- Unique additive package to handle off-spec fuel contaminated with ULO and biodiesel components

#### **BENEFITS**

- Maintains clean fuel injectors to improve fuel consumption efficiency
- Promotes complete combustion to restore power
- · Does not require elaborate dosing equipment
- · Easy to dose
- No storage stability problems
- Protects and extends life of fuel injection equipment
- · Reduces maintenance/ downtime
- Lessens the likelihood of premature fuel injection equipment failure/ seizures
- Minimizes operating costs for early injection equipment replacement





- 1. Initial Treatment dose AMERGY ULS-D at 1/1000 (1 liter for 1 ton) of ultra-low sulphur fuel.
- 2. Maintenance Treatment dose AMERGY ULS-D at 1/5000 (1 liter for 5 tons) of ultra-low sulphur fuel.

AMERGY ULS-D ultra-low sulphur fuel oil detergent should be metered continuously into the fuel. This is best accomplished by the use of the DREW Beta Metering System. Dosing in this manner assures proper mixing, dispersion, and quantity. It is usually recommended that the product be dosed to the low-pressure side of the fuel treatment system. The actual dosing location may vary depending on the engine layout and design.

Directly adding it to respective tanks prior to fuel delivery (e.g., via fuel tank sounding tubes/ vents) is an alternative dosing option. This will ensure that AMERGY ULS-D ultralow sulphur detergent is mixed and dispersed throughout the fuel.

# TYPICAL PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Yellow to dark amber liquid

Specific Gravity @ 15.6°C: 0.88 - 0.94Viscosity @ 40°C:  $< 175 \text{ mm}^2/\text{s} \text{ (cSt)}$ 

Flash Point (PMCC):  $\geq 62^{\circ}$ C Pour Point:  $\leq -9^{\circ}$ C

Solubility: Soluble in all proportions in ultra-

low sulphur fuel oil

**NOTE:** Always wear the appropriate personal protective equipment when using this product.

## **PACKAGING**

AMERGY ULS-D ultra-low sulphur fuel oil detergent is available in 25-liter pails (PCN 1410406).

### IMPORTANT INFORMATION

Drew Marine maintains Safety Data Sheets on all of its products. Safety Data Sheets contain health and safety information for your development of appropriate product handling procedures to protect your employees.

Our Safety Data Sheets should be read and understood by all of your supervisory personnel and employees before using Drew Marine products.



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