

## **137ULSW DIESEL TREAT 2000™ ULTRA LOW SULFUR WINTER PREMIUM WINTER PREMIUM**

Diesel Treat 2000™ Ultra Low Sulfur Winter Premium is a multi-functional, ashless, all season fuel additive that is specially formulated to provide clean-up and keep clean performance, as shown by the Peugeot DW-10 Injector Depositing Test, throughout the entire fuel system.

Diesel Treat 2000™ Ultra Low Sulfur Winter Premium can be used in all types of diesel fuel including Ultra Low Sulfur Winter Premium diesel fuel, low sulfur diesel fuel and biodiesel blends.

### **Features and Benefits**

Diesel Treat 2000™ Ultra Low Sulfur Winter Premium contains a highly concentrated multi-functional additive package, which provides the following benefits when used at the recommended treatment ratio:

#### **Performance**

- Improvement of the fuel's cetane rating up to 4 points.
- Improves fuel economy up to 3%
- Improves low temperature operability and gelling point of the fuel\*
- Proprietary wax anti-settling agent (WASA) for cold temperature performance
- Clean-up & Keep clean performance proven in the Peugeot XUD9, DW10B and DW10C Internal Diesel Injector Depositing (IDID) Tests.
- Reduced emissions exhaust smoke, particulates and black smoke.

#### **Contamination Protection**

- Corrosion inhibitor for fuel wetted surfaces.
- Moisture control with moisture dispersant to help prevent biological activity.
- Dispersion of insoluble gums and varnish present in low quality fuels.

#### **Wear Protection**

- Excellent anti-wear protection for injectors and fuel pumps.
- Supplemental ring and valve-train anti-wear protection.
- Lubrication of the upper cylinders, fuel pumps and injectors

#### **Storage**

- Increased fuel thermal stability to resist thermal degradation.
- Inhibition of oxidation during storage which extends storage stability.
- Rust and corrosion protection to the entire fuel system.

### **Better Protection from Water Contamination**

HydroShield is a non-alcohol jet fuel deicer/water dispersant which eliminates the problems associated with entrained and/or dissolved water present in the fuel by dispersing the water into tiny droplets. These tiny droplets are suspended in the fuel so they can be carried with the fuel in controlled amounts through the fuel filters, fuel lines, and into the combustion chamber to be burned with the fuel. Because the remaining water is dispersed and suspended in the fuel, Diesel Treat 2000™ Ultra Low Sulfur Winter Premium prevents the formation of stable fuel-water emulsions.

## **Improved Low Temperature Operability**

Diesel Treat 2000™ Ultra Low Sulfur Winter Premium contains a proprietary wax crystal modifier, cold flow improver; heavy wax modifier polymeric type additive system that when added to the diesel fuel before the fuel has reached its cloud point helps to prevent the formation of wax crystals. This proprietary polymeric additive system modifies the individual wax crystals by encapsulating and dispersing them as they are formed. This not only drastically reduces the size of the wax crystals by preventing the growth of larger wax crystals through adhesion to each other; but, also allows the wax crystals to flow through the fuel filters and lines and into the combustion chamber with the fuel.

***\*Improvement in low temperature operability is dependent upon the refining process used to make the Ultra Low Sulfur Winter Premium diesel fuel and its response to the additive.***

## **Increased Lubricity Protection with SynShield®**

Diesel engine designs are employing the use of higher fuel injection pressures, hotter fuel return temperatures, higher operating temperatures and complex engine geometry to control emissions. All of these factors result in increased fuel system wear and can shorten engine life. SynShield® technology increases lubricity and provides:

- Non-acidic, full synthetic ester chemistry
- Reduced pump and injector wear
- Non-metallic, ashless, phosphorus free

## **Bulk Treatment Ratio**

One gallon of Diesel Treat 2000™ Ultra Low Sulfur Winter Premium to 1,000 gallons of diesel fuel.

For hard to treat or unresponsive Ultra Low Sulfur Diesel Fuels use one gallon of Diesel Treat 2000™ Ultra Low Sulfur Winter Premium to 750 gallons of diesel fuel.

**NOTE: Store product 15 degrees above its pour point.**

Diesel Treat 2000™ Ultra Low Sulfur Winter Premium is registered for use and meets the US EPA requirements for blending into low sulfur and Ultra Low Sulfur Winter Premium diesel fuels. When used at the recommended treatment ratio, Diesel Treat 2000™ Ultra Low Sulfur Winter Premium will not have any measurable effect on the calculated cetane index or aromatic and sulfur content of the diesel fuel.

**THIS DIESEL FUEL ADDITIVE CONTAINS LESS THAN 15PPM OF SULFUR AND COMPLIES WITH THE FEDERAL LOW SULFUR CONTENT REQUIREMENTS FOR USE IN DIESEL MOTOR VEHICLES AND NON-ROAD ENGINES.**

**THIS DIESEL FUEL ADDITIVE IS COMPATIBLE AND APPROVED FOR USE WITH DIESEL FUELS THAT MEET ASTM D975 AND BIODIESEL THAT MEETS ASTM D6751 AND BIODIESEL THAT MEETS EN 14214.**

## **TYPICAL PROPERTIES**

Specific Gravity	0.884
Flash Point °F/°C PMCC (ASTM D93)	126°/52°
Pour Point °F/°C (ASTM D97)	-31°/-35°
Ash Content %wt. (ASTM D482)	0
Copper Strip Corrosion Test (ASTM D130)	1a
Sulfur Content (ASTM D7039)	<15 ppm