

Power Mix 2000 ULSD Plus

Multi-Functional Fuel Treatment

No. 516

DESCRIPTION:

Power Mix 2000 ULSD Plus Series are multi-functional diesel fuel conditioners designed to reduce fuel consumption in diesel engines. **Power Mix 2000 ULSD Plus** raises Cetane in fuel by 2 to 4 points. Higher Cetane numbers reduce emissions and lower fuel consumption. A proprietary catalysis increases combustion efficiency further reducing fuel consumption. Detergents and dispersants reduce injector fouling due to internal diesel injector deposits (IDID), carbon build up on injector tips, and combustion chamber surfaces allowing engines to operate at peak performance and maintain optimum fuel efficiency. **Power Mix 2000 ULSD Plus** is designed to clean and maintain the cleanliness of fuel systems, increase engine efficiency and replace the natural lubricity removed from fuel during the hydro cracking process used to make Ultra Low Sulfur Diesel (ULSD). **Power Mix 2000 ULSD Plus** can be used in all diesel, LSD, ULSD, 100% Biodiesel and Biodiesel blends. **Power Mix 2000 ULSD Plus** increases the lubricity of ULSD to meet or exceed the specification regarding lubricity in diesel established by the American Society for Testing and Material (ASTM).

COMPOSITION:

Power Mix 2000 ULSD Plus Series is blended from pure mineral base oils and select additives that provide:

Detergency	Corrosion Inhibitors
Lubricity	Demulsifiers
Improved Cetane Number	Stabilizers
Burn Improvers	Catalyst

PERFORMANCE CHARACTERISTICS:

When used consistently **Power Mix 2000 ULSD Plus** Series will provide the following benefits:

- **Reduces fuel consumption**
Reduced fuel consumption in nine independently conducted mine and quarry site tests.
Reduced fuel consumption by over 6% in laboratory dyno testing at Montana State University
Reduced fuel consumption by over 7% in dyno tests run at an EPA approved and CARB (California Air Resources Board) certified laboratory.
- **Increases engine efficiency**
A combustion catalyst combined with a Cetane number improver increases the burn ability of the fuel increasing power and performance.
- **Passes and exceeds the Cummins diesel fuel engine tests (L10 and N14)**
Cleans the fuel delivery system and the fuel injector tips and orifices, correct spray patterns are maintained, allowing the fuel to burn more efficiently.
- **Provides the needed lubricity not found in ultra-low sulfur diesel (ULSD) fuel**
Power Mix 2000 ULSD Plus increases the lubricity of ULSD to meet or exceed the specification regarding lubricity in diesel established by the American Society for Testing and Materials (ASTM).
- **Reduces engine emissions and black smoke**
- **Increases the thermal stability of ULSD fuel**
- **Removes and prevents carbon deposits in the combustion chamber**
- **Provides corrosion protection for the fuel tank, lines, pump and injectors**
- **Provides fuel storage stability and prevents gums, varnishes, sludge and moisture build-up in storage tanks**
- **Increases fuel filter life**

Power Mix Series Fuel Treatments have been used at some sites continuously since their introduction in 1994 and have been placed in over 500,000,000 gallons of fuel

POWER MIX SERIES TEST RESULTS:

OFF ROAD TEST PROGRAMS:

TEST: 9 independently conducted tests in quarries and open pit mining operations

RESULTS: Fuel consumption reduced on average by 7.0%

LABORATORY DYNO TEST PROGRAMS:

Montana State University

California Environmental Engineering (EPA approved and CARB certified laboratory)

RESULTS: Montana State University = fuel consumption reduced by 6.0%

California Environmental Engineering = fuel consumption reduced by 7.53%

REDUCED EMISSIONS:

FUEL INJECTOR CLEAN-UP EVALUATION TRANSIENT TEST RESULTS

HC	-	Reduced 5.9%
CO	-	Reduced 17.7%
NOX	-	Reduced 5.2%
PARTICULATE	-	Reduced 17.2%

CUMMINS L-10 DETERGENCY

CRC Rating

Untreated = 25.9

Treated = 9.8

CUMMINS L-10 DETERGENCY RESPONSE

Average Plunger Rating CRC

Untreated = 12.1

Treated = 4.5

HFRR LUBRICITY TEST:

HFRR Lubricity Test	
Fuel Tested	Result
Wear Scar without Power Mix ULSD Fuel Treatment	580 microns
Wear Scar with Power Mix ULSD Fuel Treatment	440 microns

TYPICAL SPECIFICATIONS:

Viscosity @ 40°C, cSt	8.12
Specific Density (water = 1)	.94
Flash Point, ASTM D 93 (°F)	167
Modified Scuffing BOCLE	Pass
Lubricity, g. min.	Pass
Peugeot XUD-9 IDI coking test	Pass
Cummins L-10 for DI	Pass
Pour Point (°F)	-30

Values shown here are typical, and may vary.

DIRECTIONS:

The recommended maintenance treat rate in diesel fuel storage tanks is one gallon of **Power Mix 2000 ULSD Plus No. 516** per 2,000 gallons of diesel fuel (1:2,000).

CAUTIONS:

For use in diesel fuel only. Do not use in gasoline. See SDS for handling instruction.

PERFORMANCE PRODUCTS GUARANTEED