

DIESEL KLEEN® + CETANE BOOST®

TECHNICAL BULLETIN 3800



Endorsed by Cummins Inc.



Diesel Kleen® + Cetane Boost® is a total injector cleaner and performance improver that cleans injectors, boosts cetane and lubricates fuel injection components. It restores lost power and fuel economy and smooths rough-running engines.

Benefits

Cleans dirty injectors and prevents injector sticking in both High Pressure Common Rail (HPCR) and older systems

Removes both Internal Diesel Injector Deposits (IDIDs) and external deposits (nozzle coking) that decrease power and fuel economy

Boosts cetane up to 6 numbers – engines run smoother with less power lag and faster cold starts

Boosts power – reduces need for downshifting

Restores lost power and fuel economy

Contains **Slickdiesel®** Lubricator to protect fuel pumps and injectors from increased wear caused by poor quality Ultra Low Sulfur Diesel (ULSD) fuel

Prevents asphaltene formations and thermal breakdown of diesel fuel – protects against sludge formations that plug fuel-filters and injectors

Provides superior corrosion protection

Effective in all diesel fuels, including ULSD, biodiesel and biodiesel blends

Boosts Cetane up to 6 Numbers

There is a direct relationship between a diesel fuel's cetane number and its ignition point. Delayed ignition is a primary cause of increased emissions and inferior engine performance. The lower the cetane number, the longer the ignition delay. Fuels with high cetane numbers burn more quickly and more completely, resulting in smoother-running engines with less power lag, lower emissions and easier engine starting.

Advanced OEM-Recommended Injector Cleaning Technology

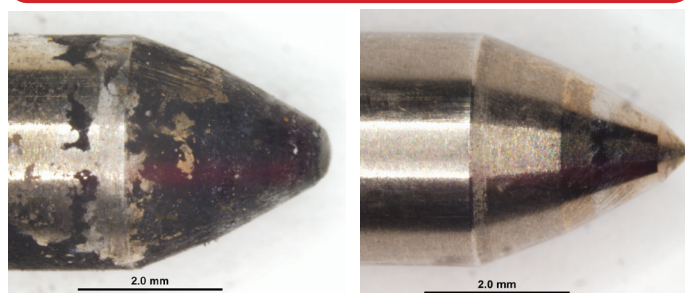
Power Service **Diesel Kleen + Cetane Boost** is formulated with the most effective diesel injector detergent technology in the industry to provide maximum clean-up and prevention of diesel deposits found in modern direct injection diesel engines. This technology prevents and restores lost power and fuel economy caused by both Internal Diesel Injector Deposits (IDIDs) and external deposits (nozzle coking). These deposits cause injector sticking and disrupt fuel flow into the combustion chamber. Diesel Kleen + Cetane Boost provides accelerated clean-up and keeps-clean performance in all industry standard diesel injector deposit tests including: DW10B, DW10C and XUD-9. The engine operational improvements are significant:

- Restoration of lost power and fuel economy
- Increased power and reduced need for downshifting
- Smoother and quieter engine operation

DW10B DIESEL FUEL INJECTOR FOULING TEST

BEFORE

AFTER



High Pressure Common Rail injectors before and after clean-up with fuel treated with Diesel Kleen + Cetane Boost.

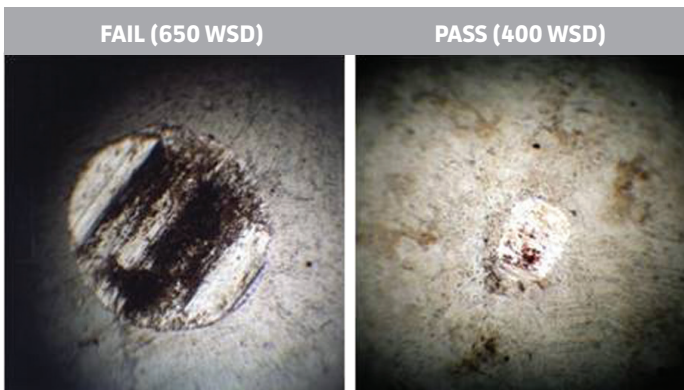
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Contains Slickdiesel® Lubricator for Maximum Fuel Lubrication

Slickdiesel is a proprietary Power Service diesel fuel lubricator that sets the standard for lubrication of diesel fuel injection systems. The components of diesel fuel injection systems are lubricated by diesel fuel. Without proper lubrication, fuel injectors and pumps are subjected to increased wear rates and premature failure. **Diesel Kleen® + Cetane Boost®** contains **Slickdiesel** and exceeds the ASTM D-975 specification of 520 Wear Scar Diameter (WSD) for lubricity in diesel fuel, allowing operators to achieve the EMA recommended 460 WSD.



High Frequency Reciprocating Rig (HFRR) evaluates the lubricity of diesel fuel. The Wear Scar Diameter (WSD) maximum is 520 microns. A WSD measuring larger than 520 does not meet lubricity specifications.

TYPICAL PHYSICAL PROPERTIES OF DIESEL KLEEN + CETANE BOOST

Color

Customer Convenience Formula (1:400)	Straw
Concentrated Formula (1:1,000)	Brown
Concentrated Formula (1:1,500)	Brown

Density (lbs/gal)

Customer Convenience Formula (1:400)	7.7
Concentrated Formula (1:1,000)	7.8
Concentrated Formula (1:1,500)	7.9

Sulfur Content

.....	<15 parts per million (ppm)
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Flash Point

Customer Convenience Formula (1:400)	116°F.
Concentrated Formula (1:1,000)	117°F.
Concentrated Formula (1:1,500)	143°F.

Solubility

In Diesel Fuel	Completely Soluble
In Biodiesel and Biodiesel Blends	Completely Soluble
In Kerosene	Completely Soluble

Shipping and Handling

Part Nos. 3016, 3025, 3080, 3128, 3850, 3855	Not regulated by DOT
Part No. 3860	Combustible Liquid N.O.S. NA 1993 (Petroleum Distillates), Marine Pollutant (2-Ethylhexyl Nitrate)

This diesel fuel additive complies with the federal low sulfur content requirements for use in diesel motor vehicles and nonroad engines.

DIRECTIONS FOR USE

Add **Diesel Kleen + Cetane Boost** as directed on the container label. To ensure thorough mixing, add prior to filling tanks with diesel fuel.

PART#	PACK	TREATS
CUSTOMER CONVENIENCE FORMULA – 1:400 TREATMENT RATIO		
3016-09	9/1 16-Ounce	Up to 40 Gallons
3025-12	12/1 32-Ounce	Up to 100 Gallons
3080-06	6/1 80-Ounce	Up to 250 Gallons
CONCENTRATED FORMULA – 1:1,000 TREATMENT RATIO		
3128-04	4/1 One-Gallon	Up to 1,000 Gallons
CONCENTRATED FORMULA – 1:1,500 TREATMENT RATIO		
3850-02	Two/2.5-Gallon	Up to 3,750 Gallons
3855	55-Gallon Drum	Up to 82,500 Gallons
3860	260-Gallon Tote	Up to 390,000 Gallons
3800	6,000-Gallon Min.	Up to 9,000,000 Gallons