

# Diesel Guard Supreme™

## SUPERIOR DIESEL PERFORMANCE

Today's sophisticated diesel engines depend on a superior grade of diesel fuel for maximum fuel economy, power and emission control. **Diesel Guard Supreme™**— premium diesel fuel additive—is specially formulated for today's high performance diesel engines.

### Diesel Guard Supreme Premium Diesel Additive:

- Improves fuel economy
- Reduces smoke and emissions
- Reduces maintenance costs
- Extends engine life

### On-Highway

Independent drivers and fleet operators want maximum fuel economy, while maintaining compliance with smoke and exhaust emission regulations. **Diesel Guard Supreme** helps equipment operate at peak performance and deliver more freight per gallon while keeping maintenance costs low and extending engine life.

### Agriculture

Farm equipment operators work long hours at the wheel in the fields. And they rely on their equipment to operate at peak performance. **Diesel Guard Supreme**, under the Agri Guard™ brand, helps provide the maximum fuel economy, power, smoke free exhaust and low maintenance farmers expect from their premium diesel fuel.

### Off-Road and Construction

Diesel engines used in construction, mining and other off-road equipment operate under heavy load and severe stop-and-go conditions. Applications that require maximum power and superior emission control. **Diesel Guard Supreme** keeps injection systems clean for maximum power output and significantly reduces smoke and emissions.

### Marine

Marine engines often operate under the heaviest loads and experience fuel stability problems due to long storage periods. Under these conditions, injector and filter plugging, smoke and soot can become serious problems. **Diesel Guard Supreme** with cetane improver provides maximum power for peak performance and reduced emissions. Fuel stabilizers keep fuel "fresh" and tanks free of insolubles and sludge.

### Special Applications

Our technical staff can develop custom formulations to meet special applications. With years of laboratory and field experience, our research and development staff is ready to assist fuel marketers and fleet operators and to help solve all types of fuel quality problems.

**Diesel Guard Supreme Antigel/Deicer**, with optional antigel and deicer additives, is the industry's most cost effective and economical way for trouble-free cold temperature operability at sub-zero temperatures.

High performance diesel engines operate in many different environments. **Diesel Guard Supreme** produces superior diesel fuel quality and superior diesel engine performance in all operating conditions.



# SUPERIOR ADDITIVE PERFORMANCE

The Engine Manufacturers Association (EMA) and various regulatory agencies have established industry standards for diesel fuel designated "Superior" or "Premium." **Diesel Guard Supreme™** meets or exceeds industry specifications and diesel

equipment operators requirements for "Superior" or "Premium" diesel fuel. **Diesel Guard Supreme™** is backed by extensive field, fleet and laboratory tests that document the **Superior Additive Performance** shown below.

## Cleans-up Injector Deposits

Injector deposit build-up can cause poor injector spray patterns that reduces engine performance. **Diesel Guard Supreme** prevents the formation of deposits as well as cleans up existing deposits as documented by the "Superior" rating in the Cummins L-10 Injector Depositing Test, Peugeot Coking Test and extensive field studies.

- Fuel Economy Improvement\*
  - Light Duty up to 13.6%
  - Heavy Duty up to 7.5%
- Reduced Black Smoke 30%\*
- Reduced Particulates 39%\*

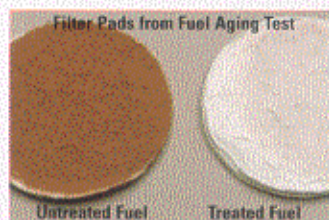
\*test data available



## Maintains Fuel Stability

Fuel stability is essential to prevent formation of insolubles and sludge, formed by high engine temperatures and extended storage. These insolubles plug filters and injectors. **Diesel Guard Supreme** provides improved thermal and storage stability to meet or exceed industry and engine manufacture standards.

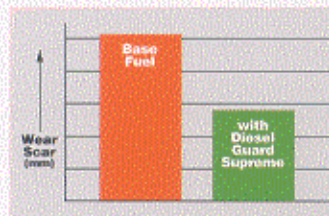
- Longer Filter Life
- Protection Against Oxidation
- Lowers Maintenance Costs
- Extends Engine Life



## Improves Lubricity

Low sulfur/aromatic diesel fuel can cause premature wear and scuffing of pumps and injectors. Wear that can lead to premature failure and expensive repairs. **Diesel Guard Supreme** contains a lubricity improver to prevent premature pump and injector wear that meets pump manufacturer's requirements.

- Protection Against Wear
- Lowers Maintenance Costs
- Meets Manufacturers Requirements
- Improves Fuel Lubricity



## Controls Water and Moisture

Water is always present in diesel fuel. It causes corrosion, sludge, filter plugging and icing in winter. **Diesel Guard Supreme** contains demulsifier to separate water and fuel in storage tanks and a dispersant to disperse a controlled amount of moisture in the vehicle fuel tank to keep it dry.

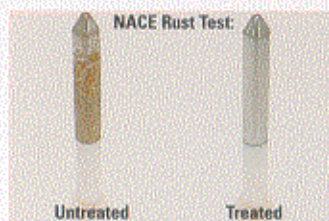
- Prevents Fuel/Water Emulsions
- Prevents Sludge
- Reduces Corrosions



## Prevents Rust and Corrosion

Condensation or free water corrode tanks and engine components, reduce engine life and increase maintenance costs. **Diesel Guard Supreme** contains rust and corrosion inhibitors to protect engine components and tanks from corrosion.

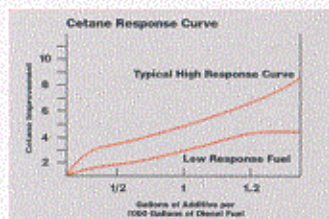
- Prevents Rust and Corrosion
- Meets NACE Test Standards
- Extends Engine Life
- Lowers Maintenance Costs



## Cetane Improvement (optional)

High cetane fuel reduces smoke, exhaust emissions and improves cold temperature starts. Various levels of cetane improver are in **Diesel Guard Supreme** to meet market and regulatory requirements.

- Improve Cold Temperature Starts
- Reduces Smoke and Particulate Emissions



## Cold Temperature Improvement (optional)

**Diesel Guard Supreme Antigel/Deicer** formula contains the most effective cold flow improvers, heavy wax modifiers and deicer in the industry. It helps prevent filter plugging due to wax and icing at sub-zero temperatures.

- Cold Temperature Improvements
  - CFPP
  - LTFT
- Prevents Icing

