

# FuelSpec®

## Specialty Fuel Additives

### FuelSpec® 195

#### Lubricity Agent for Diesel Fuels

In recent years, regulations have required the removal of sulfur from on-road Diesel fuels to <15 parts per million (ppm) sulfur. The refinery process for removing sulfur, called hydrodesulfurization, breaks up high molecular weight aromatic molecules in the fuel that contribute to a natural lubricity in Diesel fuels. Low Emission Diesel (LED) fuels are similar to gasoline in removing grease and lubricants rather than contributing to this characteristic.

Engine operators have found that the removal of lubricants from LED fuels cause wearing or galling of metal parts in fuel lines - including valves, pumps and injectors. Some operators add materials such as power steering fluid or engine oil to fuel as they fill their tanks to return some lubricity to the fuel. These are poor solutions to the problem.

The development of FuelSpec® 195 lubricity agent was based on drag reducer technology used to improve flow of petroleum fluids through pipelines. This product is superior to detergents and soaps used in some lubricity formulations. FuelSpec® 195 will:

- Return the lubricant characteristic naturally present in Diesel fuel.
- Protect valves, pumps and injectors in the fuel line.
- Prevent galling of metal parts.
- Not add harmful metal components present in power steering fluid or engine oil.
- Not harm the engine.

The dosage rate for FuelSpec® 195 is one fluid ounce per ten gallons of fuel. The product is delivered in a pint container with a side reservoir allowing easy measurement for addition to the fuel tank. As a liquid, the product easily disperses and mixes into the fuel for good results.

FuelSpec® 195 has been thoroughly tested and does not violate fuel specifications nor engine warranties when used as instructed. FuelSpec® 195 is registered with the U.S. Environmental Protection Agency (EPA) for on-road use in the United States; EPA Registration No. 235120004.