

Prevent Premature Fuel Degradation and Equipment Failure

The removal of free-standing, saturated and emulsified water is critical to preventing premature fuel degradation and equipment failure. Emulsified (entrained) water is also the hardest factor to remove in ULSD and bio-blended ULSD.

The DieselPure® filter has been proven to be highly effective at removing all water, including emulsified water, in ULSD and biodiesel blends.

The July 2016 EPA report on corrosion-influencing factors in diesel tanks cited that 83% of the diesel tanks inspected showed moderate to severe signs of corrosion. Results show that diesel tanks with cleaner, **drier** fuel are less likely to be associated with corrosion issues. With only 25% of owners reporting knowledge of corrosion prior to the research findings, one thing is clear—*you need to know what's going on inside your diesel fuel tanks.*

Created specifically to address the unique chemical properties of ultra-low sulphur diesel and biodiesel blends, the DieselPure® USLD/Bio-blend filter has a two stage single pass design. In a single cycle, fuel is pushed through the internal core media to filter out large particulate (i.e., dirt, microbial growth, etc.) and free standing water. The fuel is then passed through the layers of pleated media to remove emulsified water and fine particulate. **This completed process results in the capture of particulates down to 0.2 of a micron and 100% efficiency at removing emulsified water in ULSD and 96% in biodiesel.**



DieselPure® filters were evaluated by SAE J 1488 Version 2010.10 (fuel/water (emulsified) separation efficiency) test method using fuels with different interfacial tensions. SAE J1488 test method determines the ability of a fuel/water separator to remove emulsified water from fuel.

The DieselPure® filter SAE J 1488 Version 2010.10 exhibited unparalleled water removal characteristics using ultra-low sulfur diesel ULSD. The evaluation showed that **the DieselPure® filter was 100% efficient in separating water from ULSD.** The DieselPure® filter was also tested using ultra-low sulfur diesel fuel containing monoolien. Monoolien was added to ultra-low sulfur diesel fuel to simulate biodiesel or ultra-low sulfur diesel fuel with low interface tension. The addition of ultra-low sulfur diesel fuel with monoolien was performed to target fuel with an interfacial tension of 15 mN/m. **The DieselPure® filter was 96% efficient in separating water from fuel containing monoolien.**

