

FUELS

HiTEC[®] 4546

Refinery and Distribution Fuel Additive



Static Dissipating Additive for Ultra-Low Sulphur Fuels

HiTEC® 4546 Refinery and Distribution Fuel Additive

Static Dissipating Additive for Ultra-Low Sulphur Fuels

Application

HiTEC® 4546 Refinery & Distribution Fuel Additive is a highly effective solution for improving the conductivity of ultra-low sulphur diesel (ULSD) and gasoline (ULSG). Sulphur levels in fuel have been reduced globally to improve vehicle emissions and enable advanced exhaust treatment systems.

Reduced sulphur levels are achieved using hydrodesulphurisation processes in the refinery which also have the effect of lowering the conductivity characteristics of the finished fuel. This is due to the removal of naturally occurring polar species by this commonly used refinery process.

Particular caution should be exercised when transporting ultra-low sulphur diesel fuel using switch loading operations. These operations can lead to safety concerns due to the ability of low sulphur diesel fuel to discharge static electricity and the potentially flammable vapour phase which may be present.

In a number of countries, minimum conductivity levels for ultra-low sulphur diesel have been agreed to minimise the risk of explosion from static discharge.

25 pS/m

- NORTH AMERICA
- ASTM D975

50 pS/m

- AUSTRALIA
- The Department of Environment and Heritage

150 pS/m

- EUROPE
- UK Petroleum Industry Association Guidance

NONE
DEFINED

- ASIA PACIFIC
- Refinery specification or as per Safety Measures

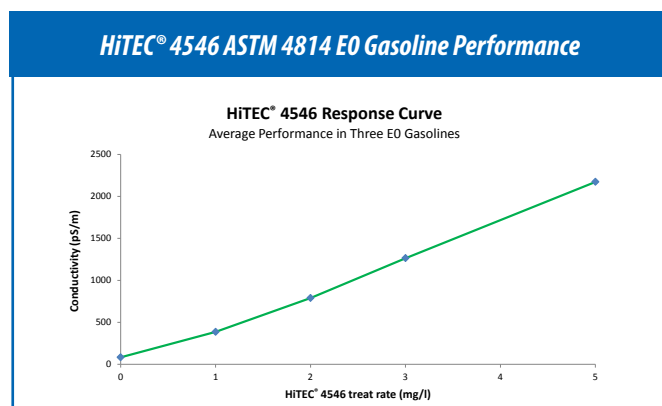
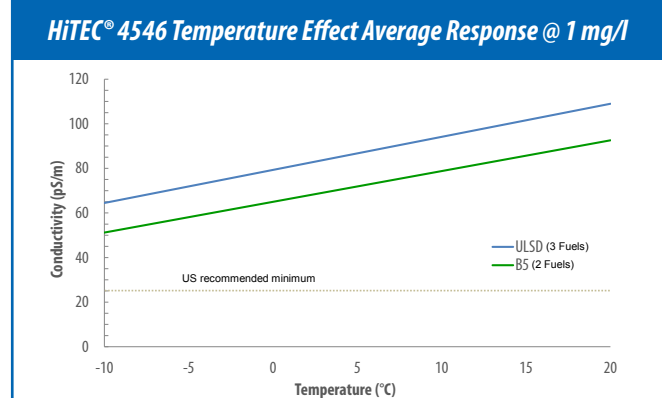
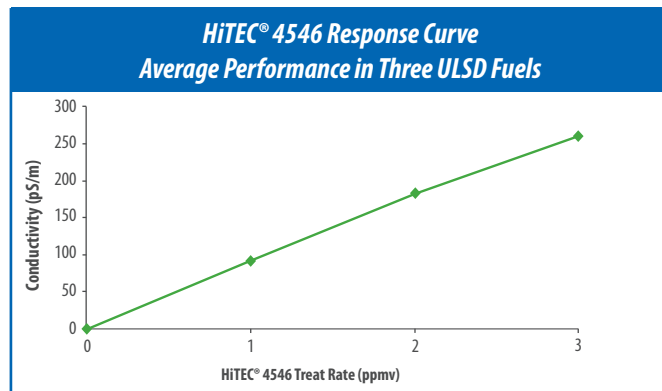
This target is achieved through the use of conductivity improvers such as HiTEC® 4546

Key Performance Benefits

- Increases conductivity performance in treated fuels
- More cost effective compliance with ultra-low sulphur fuel specifications
- Increases the rate of static discharge dissipation

Recommended Dosage

The treat-rate of HiTEC® 4546 will depend on the severity of the fuel. Typical treat rates are between 1-5 ppmv. Please contact your local Afton Chemical Representative for specific treat rate recommendations.



Typical Characteristics

Appearance:	Yellow liquid
Density at 15°C, g/ml:	0.9107
Flash point, PMCC, °C:	25 min
Pour point, °C:	< -80
Viscosity at 40°C, cSt:	15

Handling Information

HiTEC® 4546 can be stored and injected at normal ambient temperatures

© 2017, Afton Chemical Corporation is a wholly-owned subsidiary of NewMarket Corporation (NYSE:NEU). HiTEC® is a trademark of Afton Chemical Corporation. 05/17.

The information in this bulletin is, to our best knowledge, sure and accurate, but all recommendations or suggestions are made without guarantee since the conditions of use are beyond our control. Afton Chemical Corporation and its affiliates disclaim any liability incurred in connection with the use of these data or suggestions. Furthermore, nothing contained herein shall be construed as a recommendation to use any product in conflict with existing patents covering any material or its use.