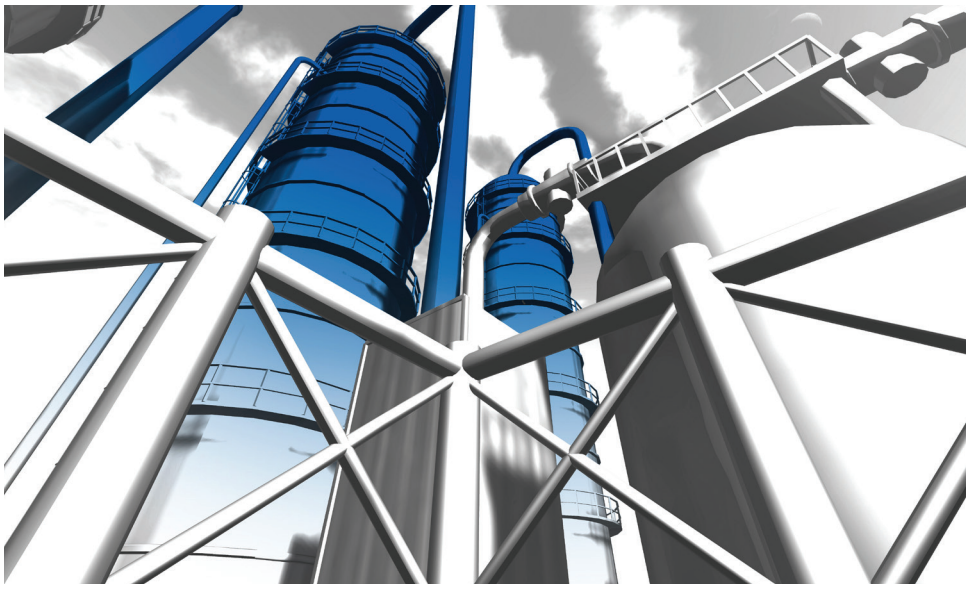
FUELS

HiTEC® 4140A

Finished Fuels Additive



Lubricity Improver for Diesel Fuels

Afton® CHEMICAL
Passion for Solutions™

HiTEC® 4140A Finished Fuels Additive

Lubricity Improver for Diesel Fuels

Application

HiTEC® 4140A finished fuels additive are the most effective solution to lubricity improvement in lower sulphur diesel fuels.

HiTEC® 4140A provides protection to metal wear surfaces by adsorbing on to the metal surface through interaction of the polar head group. The fuel soluble end provides boundary layer lubrication.

As the sulphur level of diesel fuel is reduced, the inherent lubricating characteristics of the fuel are also reduced. This is mainly due to increased refinery processing required to meet the more stringent sulphur specifications. These processes result in the removal of sulphur and nitrogen, and aromatics may be decreased.

These processes have a negative impact on the fuels natural lubricity characteristics which can be restored by the use of lubricity improvers. Vehicle manufacturers consider the lubricating properties of diesel fuels below 350 ppm sulphur unacceptable.

EN590 and other regional fuel specs require HFRR performance of minimum 460 microns wear scar diameter.

ASTM D975 fuel specs require HFRR performance of minimum 520 microns wear scar diameter.

Key Performance Benefits

- High performance at low treat-rate
- Compatible with all commonly used diesel fuel additives
- Proven 'no harm' with millions of vehicle miles
- Multi-product pipeline approved by CEPMA and UFIP

Recommended Dosage

The treat-rate required for optimum treatment of low sulphur diesel fuel will depend on the severity of refinery processing, fuel quality and the performance target but should be in the region of 50 to 200 ppmv.

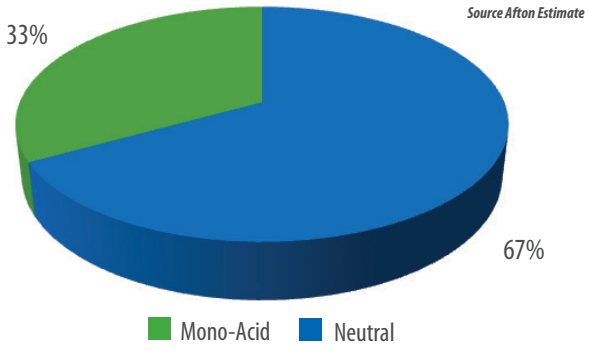
Typical Characteristics

Appearance	Amber liquid
Density, lbs/gal.	7.59
Flash point, °C (PMCC)	100 min.
Pour point, °C	-6 max.
Viscosity @ 20°C, cSt	50 max.
Acid Value, mgKOH/g	197 max.

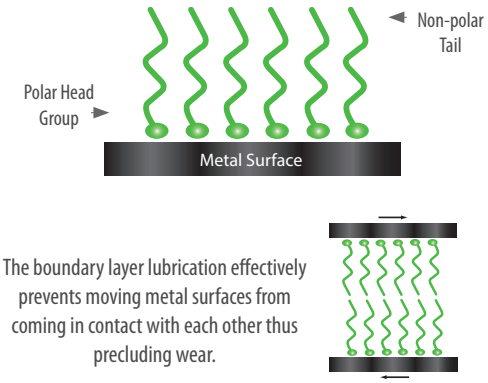
Handling Information

Max Handling Temp: 50°C
Shelf Life: 48 months @ ambient temperature

Global Lubricity Market: 60,000MT of Active Component

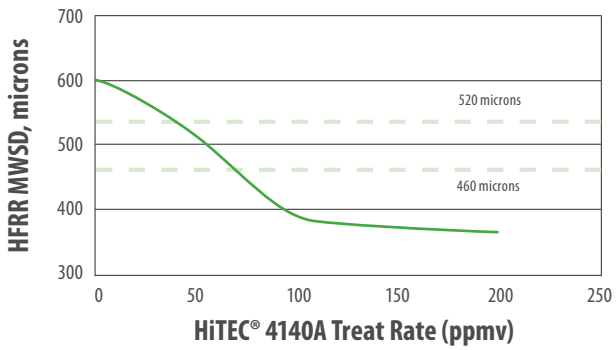


HiTEC® 4140A Protects Against Wear



The boundary layer lubrication effectively prevents moving metal surfaces from coming in contact with each other thus precluding wear.

HiTEC® 4140A Lubricity Improvement
Average in Global Diesel Fuels



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