

SERVO® - LID : DIESEL FUEL LUBRICITY IMPROVER

Introduction

Due to environment concerns sulphur level is being brought down to very low levels in the range of 10 to 500 ppm to produce ultra low sulphur diesel (ULSD). However, as refineries increase the severity of hydrotreating to cut sulphur content to less than 500 ppm level, most of the natural lubricity imparting polar compounds also get removed leading to inadequate lubricity of ULSD.

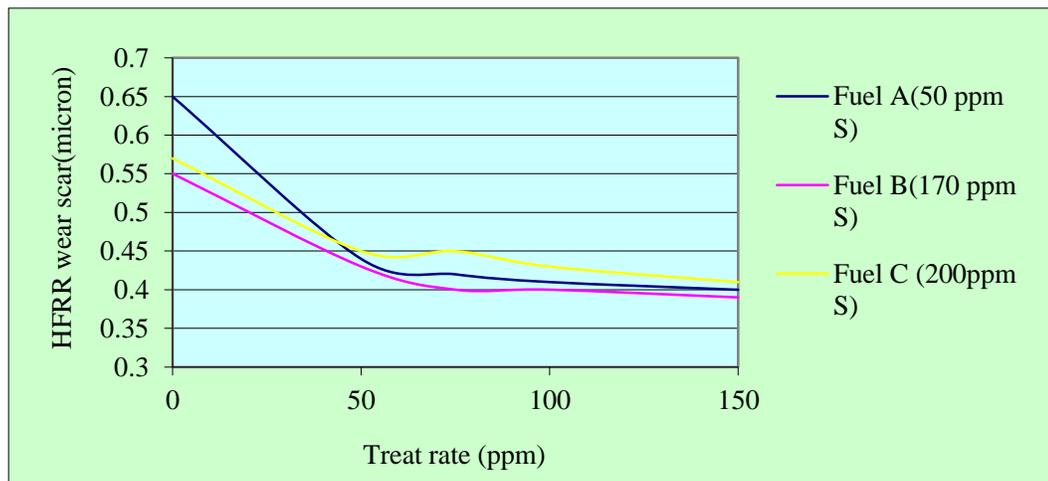
The Solution

The addition of lubricity improver SERVO LID developed by IndianOil is a convenient

way to improve the lubricity of ULSD to protect components such as injector pumps and fuel injectors against premature wear. SERVO LID is an excellent lubricity improver imparting desired lubricity to ULSD to meet the standard requirement of minimum 0.46 mm of ULSD in HFRR Test at the lowest concentration levels.

The Performance

Lubricity test: **HIGH FREQUENCY RECIPROCATING RIG test (HFRR)** response of SERVO- LI in Low Sulfur diesel fuels (as per ISO12156)



The diesel fuel specifications IS: 1460 specifies 0.46 mm as HFRR value

Product Highlights

- Excellent performance in HFRR (ISO: 12156-1).
- Excellent performance in No Harm Test (Antagonism with Engine Oil).

Method A:

Fuel additive + Engine oil (TBN 10-12) + Fuel blended in ratio of 1:2:20 v/v and kept at 50°C for 4 Hrs.

Method B:

Fuel additive + engine oil (TBN10-12) blended in ration 1:1 v/v and kept at 90°C for 72 Hrs. A portion of mixture then dissolved in fuel in ratio of 1:25 v/v
The visual appearance, filtration rate and amount of sediments by filtering 100 ml portion of mixture through 0.8 micron filter paper is monitored.

- Biodegradable Source.
- Good Storage Stability.

- Recommended treat rate 25-100 ppm (v/v) depending upon the lubricity of base diesel fuel.

Typical Properties

Characteristics	Limits
Appearance	Amber colored liquid
Sp. Gravity @ 15°C	0.90-0.92
K.V. @ 40°C, cSt	16-21
Flash point, COC, °C , min	190
TAN ,mgKOH/gm	180-200
Refractive Index	1.46-1.48
IR Spectroscopic Examination	Conform to standard spectrum

Packaging

Servo-LID is available in 190 kg MS drums.