COMPONENTS

HiTEC® 5777

Dispersant Olefin Copolymer VI Improver

Provides Superior Protection Against Soot-related Wear and Oil Thickening

Afton® CHEMICAL
Passion for Solutions™

HiTEC® 5777 Dispersant Olefin Copolymer VI Improver

Provides Superior Protection Against Soot-related Wear and Oil Thickening

Application

HiTEC® 5777, a dispersant olefin copolymer viscosity index improver, demonstrates unique performance in today's diesel engines. It provides superior protection against soot-related wear and oil thickening. HiTEC® 5777 prevents wear through two independent mechanisms. First, it is more shear stable than most conventional viscosity index improvers, maintaining its original formulated properties. This makes it more capable of protecting moving parts from abrasive soot particles. Second, HiTEC® 5777 forms a protective film on metal surfaces under pressure, a feat which non-dispersant viscosity index improvers cannot accomplish. This film, which is different from the film created by normal antiwear additives, remains durable even in the presence of soot.

Key Performance Benefits

- Offers dispersancy performance in both gasoline and diesel engines
- Excellent shear stability capable of meeting European requirements
- Excellent engine cleanliness in field testing (see oil pans image)

Recommended Dosage

Dosages of HiTEC® 5777 are generally recommended to meet the 10 hour L-38 stay-in-grade requirements for API specifications are given below. Recommended supplemental dosages to meet the more severe ACEA specifications are given in parentheses.

SAE Grade	5W-30	10W-30	10W-40	15W-40	20W-50
HiTEC® 5777 (vol.)	9.2% (9.8%)	6.8% (7.0%)	10.5% (11.0%)	8.0% (9.0%)	7.0% (7.5%)

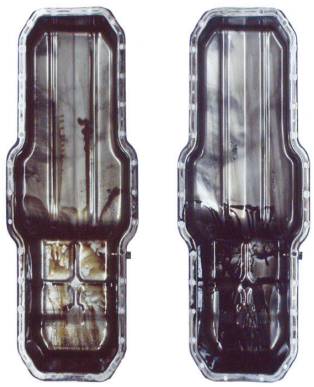
Actual treats vary with base stock and viscosity targets. Please contact your Afton Chemical representative for specific recommendations.

Typical Characteristics

Appearance	Clear to slightly hazy brown viscous liquid
Specific Gravity @ 15.6/15.6°C	0.863
Density, lbs/gal.	7.19
Flash Point, °C (PMCC)	135 min.
Viscosity @ 100°C, cSt	1135
Thickening Power (TP), cSt @ 100° C	6.1

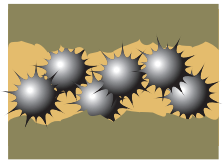
Handling Information

Max Handling Temp: 250°F (120°C)
Shelf LIfe: 36 months @ ambient temperature

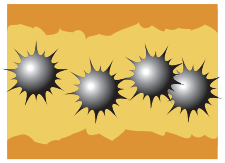


Diesel engine oil containing HiTEC 5777

Diesel engine oil containing a non-dispersant VM



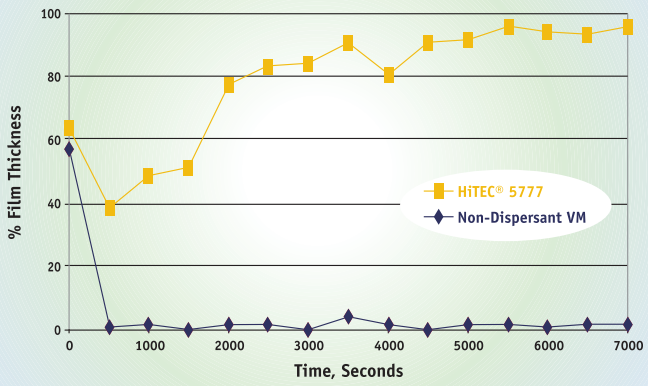
Film thickness < soot size
More abrasive wear



Film thickness > soot size
Less abrasive wear

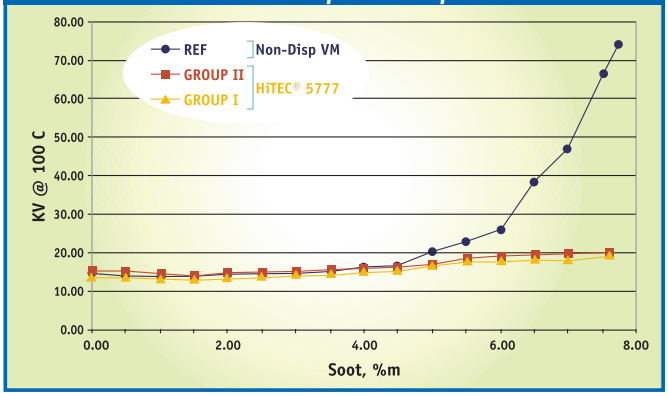
Film Thickness HiTEC® 5777 vs NDVM

HiTEC® 5777 exhibits excellent engine cleanliness in field testing.



Mack T-11 Viscosity Increase

HiTEC® 5777 demonstrates unparalled viscosity control in Mack T-11 test in both Group 1 and Group II base stocks.



Afton® CHEMICAL