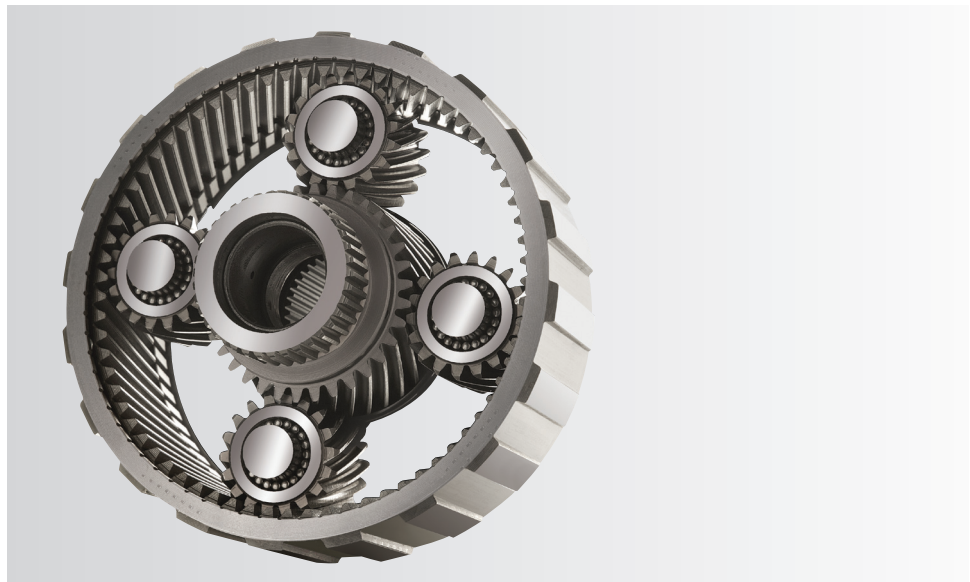


DRIVELINE

HiTEC[®] 419

ATF Additive Package



Standard tier, with GM Performance and Approvals from ZF, Voith and MAN

HiTEC[®] 419 ATF Additive Package

Standard Tier, with GM Performance and Approvals from ZF, Voith and MAN

Automatically First™



Key Performance Benefits

HiTEC[®] 419 additive is a versatile ATF package that offers the ability to easily formulate high quality automatic transmission fluids, using a wide variety of base stocks.

HiTEC[®] 419 provides customer benefits in terms of its shear stable VII which:

- Maintains film thickness leading to better wear protection
- Improves low temperature performance resulting in better cold starting
- Improved performance in a wide range of operating conditions

HiTEC[®] 419 additive is also available with the addition of red dye as HiTEC[®] 419R additive.

Recommended Dosage

HiTEC[®] 419 is recommended for use at a treat-rate of 11.4% wt. for Ford and GM vehicles of model years 1990 and earlier. It can also be used at a treat-rate of 5.7% wt. for lower performance level applications satisfied by 'Type A Suffix A' (TASA) fluids.

Handling Information

Max Handling Temp: 70°C
Shelf Life: 18 months

Approvals

Product	ATF Specifications														
HiTEC [®] 419	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●

- original approval possible
- re-blend approval possible
- formerly approved, approvals not possible
- meets requirements, approvals not possible

* Ford and GM vehicles of model years 1990 and earlier.

Afton Product Comparison

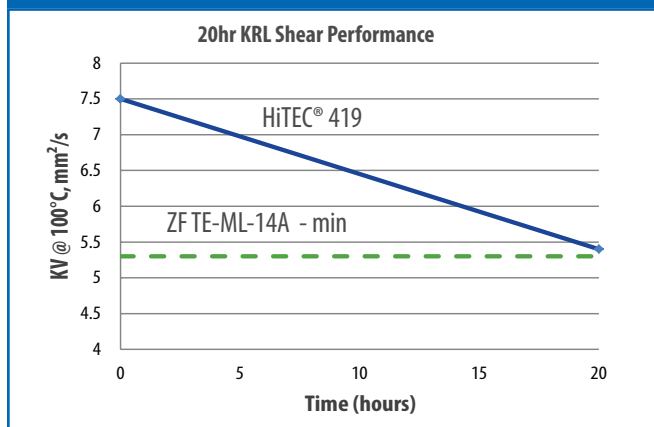
Performance	Benefit	Economic	Standard		Premium				Top
		HiTEC [®] 410	HiTEC [®] 419	HiTEC [®] 429	HiTEC [®] 2414	HiTEC [®] 481	HiTEC [®] 2018	HiTEC [®] 4014	HiTEC [®] 4006
Oxidative stability	Fluid life, lower parts wear	Good	Good	Better	Better	Better	Better	Best	Best
Friction durability	Fluid life	Good	Good	Better	Better	Better	Best	Best	Best
Shear stability	Lower parts wear	Good	Better	Better	Better	Best	Better	Best	Best
Low temp. performance	More efficient cold-starting	Good	Good	Better	Better	Best	Better	Best	Better
Treat-rate	Fluid cost	Best	Best	Better	Better	Good	Good	Good	Good
Range of OEM specs	Inventory, logistics	Good	Good	Better	Best	Best	Good	Good	Better

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Excellent Shear Performance = Extended Wear Protection



Typical characteristics

Appearance: Dark brown liquid
 Density at 15°C, g/ml: 0.92
 Flash Point (PMC), °C: 105 min
 Kinematic Viscosity at 100°C, mm²/s: 220