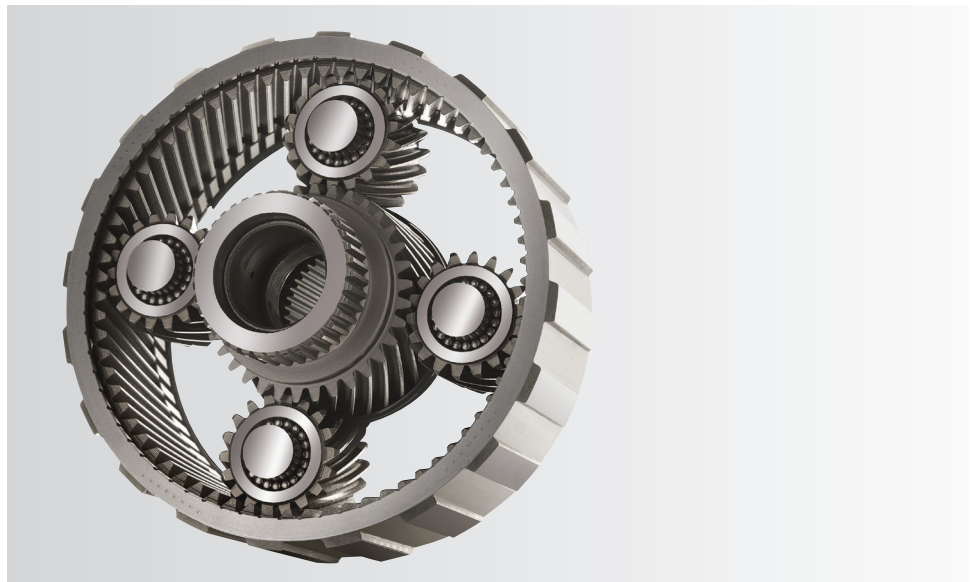


DRIVELINE

HiTEC[®] 481

Automatic Transmission Fluid



ZF and Voith Extended Drain Approvals, Plus GM IIIH, Ford
MERCON[®] V and Allison C-4 Approvals

 **Afton[®]**
CHEMICAL
Passion for Solutions[®]

HiTEC® 481 Automatic Transmission Fluid

ZF and Voith Extended Drain Approvals, plus GM IIIH, Ford MERCON® and Allison C-4 Approvals

Automatically **First**™ 

Key Performance Benefits

HiTEC® 481 is an Automatic Transmission Fluid with a significant number of OEM service fill approvals, including ZF TE-ML 14B and Voith H55.6336 extended drain approvals.

HiTEC® 481 provides many end-user benefits including:

- Excellent low temperature properties
 - delivering improvement in cold start performance
- Good shear stability
- Excellent thermal and oxidative stability
 - improved component protection and cleaner transmissions
- Superior corrosion and wear protection
 - extended life for critical parts
- Friction Durability and Retention
 - leading to enhanced driver comfort and extended clutch life

Typical Characteristics

Appearance:	Clear red liquid
Density at 15 °C, g/ml:	0.853
Kinematic Viscosity at 100 °C, mm ² /s:	7.7
Flash Point, °C (PMCC):	135 min.
Brookfield Viscosity at -40 °C, mPa.s:	11,000

Handling Information

Max Handling Temp: 60°C
Shelf Life: 60 months at ambient temperature

Recommended Dosage

HiTEC® 481 is a finished fluid.

Approvals

Product	ATF Specifications																									
ALLISON TES-228 (C-4)	3†	3	1†	3	3	3†	1	1	1	1	3	3	1	1	3	1	3†	1	2	2	3	1	1	3†	1	
Ford Pre - 2005 ^μ																										
Ford MERCON® V																										
GM IID ^μ IE ^λ																										
GM IIIG ^α																										
GM IIIH ^β																										
MAN 339 L1, L2																										
MAN 339 Z1, V1																										
MAN 339 Z2																										
MAN 339 V2																										
CHRYSLER +3																										
TASA																										
VOITH H55.6335																										
VOITH H55.6336																										
VOLVO CE 97340																										
VOLVO CE 97341																										
ZF TE-ML 02F																										
ZF TE-ML 03D																										
ZF TE-ML 05L, 21L																										
ZF TE-ML 09																										
ZF TE-ML 11A, 11B																										
ZF TE-ML 04D, 14A																										
ZF TE-ML 14B																										
ZF TE-ML 16L																										
ZF TE-ML 17C																										

Product Status	Specification Status	Notes
<ul style="list-style-type: none"> ● Approved ● Meets Requirement ● Suitable for Use 	<ul style="list-style-type: none"> 1 Formal Approval 2 Self Certifying 3 Obsolete 	<ul style="list-style-type: none"> Ω For GM vehicles of Model Years 1990 and earlier λ For GM vehicles of Model Years 1993 and earlier α For GM vehicles of Model Years 2003 and earlier β For GM vehicles of Model Years 2006 and earlier μ For Ford vehicles of Model Years 2005 and earlier † Formerly approved

Afton product comparison

Performance	Benefit	Economic	Standard		Premium			Top	
		HiTEC® 410	HiTEC® 419	HiTEC® 429	HiTEC® 2414	HiTEC® 481	HiTEC® 2018	HiTEC® 4014	HiTEC® 3491LV
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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