



TRIAX DTF-1 Professional

Full-Synthetic Drive Train, Active Drive System & Transfer Case Fluid — For
Active 4×4 and AWD Couplings

Rev: 2026-05-19

DESCRIPTION

TRIAX DTF-1 Professional is a full-synthetic PAO/ester-based drive train and active transfer case fluid engineered for the demanding friction, load, and thermal requirements of modern active 4×4 and AWD coupling systems. The PAO/ester base oil platform combined with shear-stable VI improvers and a precision-tuned additive system — including extreme-pressure additives, friction modifiers tuned for clutch-pack and chain-driven couplings, anti-wear chemistry, and corrosion inhibitors — delivers exceptional load-carrying capacity, smooth predictable engagement, and outstanding component protection. Designed to exceed the performance requirements of OEM factory fluids and after-market transfer case fluids from BMW, Audi, Porsche, VW, Mercedes-Benz, Land Rover, and others, DTF-1 Professional remains thermally and oxidatively stable in continuous service, supporting drain intervals up to 100,000+ miles in properly sealed transfer cases.

PERFORMANCE HIGHLIGHTS

- Active-coupling friction control — precisely tuned friction profile delivers smooth, predictable engagement in modern 4×4 and AWD systems (BMW xDrive, Audi Quattro, VW 4Motion) without slip, judder, or harsh lockup
- **Extreme drain capability:** PAO/ester synthetic base oil platform with shear-stable VI improvers delivers oxidation stability and component protection for drain intervals up to 100,000+ miles*
- **High load capacity** and significant wear reduction for transfer case gears, bearings, and chain-drive components under sustained high-torque operation
- Wide operating range — -50 °C (-58 °F) pour point ensures instant cold-start engagement in extreme climates; full performance retention at sustained high operating temperatures
- Excellent heat transfer keeps transfer case operating temperatures low — extending bearing, clutch, and seal service life
- Smooth, predictable drive engagement under sudden torque application, hard acceleration, hard cornering, and heavy off-road loading
- Fill-for-life service in properly sealed transfer cases when the vehicle OEM does not specify a change interval

*Drain interval represents the lubricant's capability under normal duty in a mechanically sound transfer case with regular fluid analysis. USE IN ACTIVE TRANSFER CASES AND DRIVE TRAIN COMPONENTS ONLY. Do not use in differentials (except where specified), axles, manual transmissions, or units requiring ATF. Always consult the vehicle owner's manual.

SPECIFICATIONS & APPLICATIONS

TRIAX DTF-1 Professional is engineered for active transfer cases and drive train couplings in European, Asian, and US vehicles — including BMW xDrive, Audi Quattro, VW 4Motion, Porsche AWD, Mercedes-Benz 4MATIC, Land Rover full-time 4WD, Mopar BorgWarner-equipped trucks and SUVs, Nissan AWD, Genesis/Kia AWD, and Mazda AWD applications. Single-fluid coverage replaces multiple OEM-specific factory fills.

Meets or exceeds the following OEM specifications:

- BMW DTF-1 75W — P/N 83220306816, 83222397244, 83222409710 (xDrive Transfer Case)
- VW/Audi G 052 515 A2, G 052 533 A2, G 052 536 A2, G 055 515 A2
- Porsche 000.043.301.36, 000.043.305.63
- Mercedes-Benz 239.41 (Torque-on-Demand TOD)
- Land Rover IYK500010 / LR0753 / TF-0753 / TF-0870
- Mopar 68049954AA / 68049954AC (BorgWarner 44-40)
- Nissan 999MP-TF0870P (ATX90A Transfer Case)
- BorgWarner ATC300, ATC350, ATC400, ATC450, ATC500, ATC700
- Genesis / Kia TF-0870B (G70, G80, G90, Stinger AWD)
- Mazda 0000-77-SG1-QT (Differential / Active AWD)

TYPICAL PROPERTIES

Parameter	TRIAX DTF-1 Professional	Test Method
Viscosity, Kinematic @ 40 °C, cSt	27.80	ASTM D445
Viscosity, Kinematic @ 100 °C, cSt	6.20	ASTM D445
Viscosity Index	180	ASTM D2270
Pour Point, °C (°F)	-50 (-58)	ASTM D97
Color	Blue	Visual

These are typical values. There may be small differences in actual values which are a normal part of production and do not affect product performance.

VEHICLE APPLICATION LIST

The following vehicle applications have been verified compatible with TRIAX DTF-1 Professional. List is not exhaustive; consult the OEM specifications on page 1 for additional applications.

BMW xDrive — Transfer Case Fluid

2 Series F22/F23 (2014+): 228i xDrive, 230i xDrive, M235i xDrive, M240i xDrive
3 Series E90/E91/E92/E93 (2006-2013): 325xi, 328xi, 330xi, 335xi
3 Series F30/F31/F34 (2012+): 320i xDrive, 328d xDrive, 328i xDrive, 330i xDrive, 335i xDrive, 340i xDrive
4 Series F32/F33/F36 (2014+): 428i xDrive, 430i xDrive, 435i xDrive, 440i xDrive
5 Series E60/E61 (2004-2010): 525xi (06-07), 528xi, 530xi (06-07), 535xi
5 Series F10/F11 (2011-2016): 528i xDrive (12-16), 535d xDrive, 535i xDrive, 550i xDrive
6 Series F12/F13 (2012-2018): 650i xDrive
7 Series F01/F02 (2009-2015): 750Li xDrive
X1 E84 (2013-2015): X1 28i xDrive, X1 35i xDrive
X3 E83 (2004-2010): X3 2.5i (M54), X3 3.0i (M54), X3 3.0si (N52)
X3 F25 (2011-2017): xDrive28d, xDrive28i, xDrive35i
X3 G01 (2018+): X3 M40i
X4 F26 (2015-2018): X4 28i xDrive, X4 35i xDrive, X4 M40i xDrive
X4 G02 (2019+): X4 M40i, X4 xDrive30i
X5 E53 (2000-2006): X5 3.0i (M54), X5 4.4i (N62), X5 4.8is (N62)
X5 E70 (2007-2013): 3.0si, 4.8i, X5 M, xDrive35d, xDrive35i, xDrive50i
X5 F15 (2014-2018): xDrive35d, xDrive35i, xDrive50i
X5 M F85 (2015-2018): X5 M
X5 G05 (2019+): xDrive40i, xDrive50i
X6 E71 (2008-2014): X6 M, xDrive35i, xDrive50i
X6 F16 (2015-2019): xDrive35i, xDrive50i
X6 M F86 (2015-2019): X6 M

Volkswagen / Audi — G 052 515 A2, G 055 515 A2, G 052 533 A2, G 052 536 A2

Volkswagen Touareg (2004-2017): 3.2L VR6, 3.6L VR6, 4.2L V8, 5.0L V10 TDI, 3.0L V6 TDI — 6-Spd Auto Transfer Case
Volkswagen Beetle (2007-2010); Jetta SE/SEL/Base (2007-2019); Golf (2010-2012)
Audi A4 Quattro (2009-2018); A5 Quattro (2008-2018); S4 (2010-2016); Q7 (2011-2015)

Porsche — 000.043.301.36, 000.043.305.63

Cayenne (2003-2010): 3.2L V6, 3.6L V6, 4.5L V8, 4.8L V8 — 6-Spd Auto Transfer Case
Cayenne SUV (2011-2018): 3.0L V6, 3.6L V6, 4.8L V8 — 6-Spd / 8-Spd Auto including Hybrid
Macan SUV (2015-2021): 2.0L (Base), 2.9L (GTS, Turbo), 3.0L (S, GTS), 3.6L (Turbo) — Center Transfer Case

Land Rover / Range Rover — IYK500010, LR0753, TF-0753, TF-0870

Discovery (2017-2018): 3.0L Supercharged V6 Gas; 3.0L Turbocharged V6 Diesel
LR3 (2005-2009): 4.4L V8 Gas
LR4 (2010-2016): 5.0L V8 Gas; 3.0L Supercharged V6
Range Rover (2006-2018): 3.0L Supercharged V6 Gas, 3.0L Turbocharged V6 Diesel, 4.2L SC V8, 4.4L V8, 5.0L V8 (NA & SC)
Range Rover Sport (2006-2018): 3.0L SC V6 Gas, 3.0L TC V6 Diesel, 4.2L SC V8, 4.4L V8, 5.0L V8 (NA & SC)

Other Applications

Genesis G70, G80, G90 AWD: TF-0870B
Kia Stinger AWD: TF-0870B
Mazda Differential / Active AWD: 0000-77-SG1-QT
Mopar (BorgWarner 44-40 Transfer Case): 68049954AA, 68049954AC
Nissan ATX90A Transfer Case: 999MP-TF0870P / TF0870