



TRIAX Fleet Supreme

Full Synthetic Friction-Modified Heavy Duty Diesel Oils

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DESCRIPTION

TRIAX Fleet Supreme Synthetic Diesel Engine Oils are engineered for maximum protection and durability in today's high-output, turbocharged diesel engines while maintaining full OEM and API CK-4 compliance. These fully formulated synthetic HDEOs are designed for severe-duty operation in advanced engines from Cummins, Detroit Diesel, Volvo, Mercedes-Benz, and Ford, including those equipped with modern exhaust after-treatment systems such as DPF and SCR.

Fleet Supreme utilizes top tier synthetic base oils and an advanced, high-performance additive system built around a powerful anti-wear and MoDTC and Boron based friction-control architecture, combining robust ZDDP protection with molybdenum and boron chemistry. An enhanced ashless dispersant technology aggressively controls soot, oxidation byproducts, and contaminants, keeping particles finely suspended and preventing sludge, varnish, and abrasive wear. This formulation delivers outstanding wear protection under high load, superior soot handling in EGR-equipped engines, strong oxidation resistance, and exceptional oil durability in all conditions.

PERFORMANCE

- Excellent durability even in adverse conditions such as towing and hauling
- High shear stability — stays in grade even under high loads and temperatures
- Significantly improved wear control: up to 90% less bearing wear and up to 80% less ring wear vs OEM requirements (Mercedes-Benz OM 646 engine test)
- Drastically improved detergency and soot control for clean turbochargers, pistons, and bearings
- Noticeably quieter engine operation
- Faster, quieter turbocharger spooling
- Longer-lasting turbocharger critical parts, such as shafts and bearings prone to wear
- Exceptional resilience to oxidative thickening and shear, even under extreme conditions
- Will not burn onto turbo bearings, providing exceptional protection against turbo deposits
- Complete protection for emission control systems such as Diesel Particulate Filters (DPF) and SCR
- Excellent cold-flow properties down to -45°C or lower

PERFORMANCE HIGHLIGHTS

Minimum 2% Fuel Economy vs the same viscosity grade from other major brands. Verified performance in OEM-referenced heavy duty engine tests:

Mercedes-Benz Truck Engine Test — OM 501 LA (Euro 5)

120,000 km

- 40%** Less Engine Deposits — vs OEM spec
- 64%** Less Overall Wear — vs OEM spec
- ZERO** Bore Polish — vs OEM spec of max 2
- 59%** Less Oil Consumption — vs major brands

Mercedes-Benz OM 646 DE22 LA — CEC-L99-08 Engine Test

150,000 km

- Up to 90%** Less Bearing Wear — main / con-rod bearings, vs OEM requirements
- Up to 80%** Less Ring Wear — radial & axial rings, vs OEM requirements
- 61%** Less Wear on Critical Parts — vs OEM reference

Virtually no signs of wear on rings, main bearings, cam bearings, rod bearings, and cylinder liners.

Eliminates Stiction in HEUI (Power Stroke) Injectors

TRIAX Fleet Supreme is formulated to eliminate HEUI injector stiction in Power Stroke diesel engines by keeping high-pressure oil systems clean and responsive. Advanced synthetic base oils and a powerful ashless dispersant system prevent varnish and deposit buildup inside injector spool valves, allowing injectors to move freely—especially during cold starts. The result is faster injector response, smoother idle, easier starts, and consistent injection control without harsh solvents or temporary additives.

Safe, Dependable Extended Drain Intervals*

TRIAX Fleet Supreme's superior thermal stability, combined with proprietary nano-friction modifiers, dramatically reduces internal engine friction. This lowers operating temperatures and minimizes oxidative stress and shear,

allowing the oil to maintain its protective properties for significantly longer periods, well over OEM and other major lubricants.

100,000 + miles For highway service semi-trucks

25,000 + miles For diesel pickups such as Ford F250 / F350, GMC, Dodge RAM

750 to 1,000 hrs For heavy equipment in severe service — farm tractors and construction equipment

**Drain intervals reflect the capability of the product in mechanically sound engines with good maintenance practices and oil analysis. Engine blow-by, coolant leaks, and other contamination can occur at any time and directly affect oil longevity. Performance figures are from the referenced OEM engine tests.*

SPECIFICATIONS & APPLICATIONS

Triax Fleet Supreme diesel oils are designed for use in heavy on / off road diesel engines using ultra low sulfur diesel fuel and a fully formulated API CK-4 engine oil, including those requiring relevant OEM specifications, as listed below. Triax Fleet Supreme is a low ash product, offering superior protection for all types of diesel after-treatment devices such as DPF, SCR, EGR systems fitted on modern heavy duty vehicles.

DIESEL PICKUP TRUCKS: TRIAX Fleet Supreme engine oils are fully compatible with all heavy duty diesel engines found in Dodge, Ford, Chevy and GMC diesel trucks, which require an API CK-4 or CI-4 engine oil or the specifications listed below. This includes the Duramax, Ford Power Stroke, Cummins high output diesel engines.

SPECIFICATION COVERAGE: TRIAX Fleet Supreme engine oils are guaranteed to meet or exceed the following OEM specifications, approval levels or industry standards:

- API CK-4, CI-4 and CI-4 Plus
- API SN, SL (15W-40, 5W-30)
- Military Specification MIL-PRF-2104K
- Caterpillar ECF-3
- Volvo VDS-3, VDS-4, VDS-4.5
- ACEA E7, E9-12
- Mack EO-M Plus, EO-N Premium Plus 03, EO-O Premium Plus 07, & EOS 4.5
- Cummins CES 20081, 20086
- Mercedes Benz MB 228.51, 228.31
- Detroit Diesel 93K222, 93K218, 93K215, 93K214
- Global Specification DHD-1
- MAN 3275, MAN3575
- Renault VI RLD-3, RLD-4 (Except 5W-30)
- JASO DH-2
- MTU Type I & II, MTU Type 2.1
- Deutz DQC III-10 LA
- Ford WSSM2C171-E
- Ford WSS-M2C171-F1 (5W-40 and 15W-40)
- Scania LDF-2

TYPICAL PROPERTIES

Parameter (test)	10W-30	15W-40	5W-40	5W-30
Viscosity, Kinematic cSt at 40°C	74.66	103.4	92.20	72.40
Viscosity, Kinematic cSt at 100°C	12.00	15.30	15.20	12.20
Viscosity Index (ASTM D2270)	174	160	182	166
Flash Point, °C (°F)	228 (442)	228 (442)	228 (442)	228 (442)
Pour Point, °C (°F)	-45 (-49)	-38 (-36)	-45 (-49)	-50 (-60)
CCS Viscosity @ °C, cP (ASTM D5293)	4866 (-25)	4963 (-20)	5594 (-30)	5360 (-30)
Total Base Number (ASTM D2896)	10	10	10	10
HTHS High Temp High Shear, cP (ASTM D5481)	3.60	4.56	4.4	3.60
Sulfated Ash Content % Wt. (ASTM D874)	0.98	0.98	0.98	0.98
Noack (Wt %)	5.22	4.5	9.5	10.5

NOTE: These numbers are typical values; there may be small variations from batch to batch. These variations are a normal part of the manufacturing process and do not affect performance.