PRODUCT DATA SHEET

TRIAX FLEET ULTRA ESP

Synthetic Blend Friction Modified Heavy Duty Diesel Oils

Revision 06, May 5, 2026

DESCRIPTION

TRIAX Fleet Ultra ESP is a friction-modified and friction-optimized synthetic blend API CK-4 heavy duty diesel engine oil engineered for U.S. post-2017 EPA-compliant and European Euro 5 and newer engines, while maintaining full backwards compatibility with older platforms. Purpose-built for the demands of long-haul fleet, transport, and commercial trucking operations, the formulation leverages a synergistic Molybdenum, Boron, and ZDDP additive system to deliver superior friction management, wear protection, and oxidative durability. The advanced detergent and dispersant package supports extended drain intervals, maintains aftertreatment compatibility (DPF, SCR, DOC), and delivers consistent performance under sustained highway operation across a wide temperature range.

PERFORMANCE HIGHLIGHTS

- Capable of drain intervals exceeding **100,000 miles** in mechanically sound engines under proper maintenance
- Outstanding friction-modifying and wear-reducing properties — up to 65% drop in friction coefficient vs. industry standards
- Significant improvement in overall engine component wear
- **40% less** engine deposits and **64% less** overall wear vs. OEM spec, **zero** bore polish (vs. spec max of 2), and **59% less** oil consumption vs. OEM spec*
- **61% less** wear on critical parts, up to **80% less** radial and axial ring wear, and up to **90% less** main and connecting rod bearing wear vs. OEM requirements**
- State-of-the-art detergent and dispersant package for outstanding deposit control
- Excellent fluid life and oxidation control with superior stay-in-grade characteristics
- Permits “dry” lubrication at startup and during cold winter months — nearly eliminating engine startup wear and noise
- Quick-fill lubrication flow during cold weather start-up
- High retention TBN for improved acid neutralization and corrosion protection
- Outstanding stay-in-grade shear stability

**Per Mercedes-Benz OM 501 LA (Euro 5) engine test results. **Per Mercedes-Benz OM 646 DE22 LA (CEC-L99-08) 150,000 km engine test.*

SPECIFICATIONS & APPLICATIONS

Fleet Ultra ESP is recommended for 2016 and newer heavy duty diesel engines from all major OEMs and is fully backwards compatible with CJ-4 and CI-4 Plus applications. Applications include commercial and pickup trucks, construction and agricultural equipment, and severe-service operation across on-road, off-road, quarrying, and mining.

API CK-4 Licensed and exceeds the following OEM specifications:

- API CK-4, CJ-4, CI-4 Plus, CI-4, CH-4
- API SN (15W-40 only)
- ACEA E9-12, E9-16
- Cummins CES 20086
- Mack EOS 4.5 **(OEM approved)**
- MB 228.31
- DDC 93K222
- Caterpillar ECF-3
- Volvo VDS-4.5, VDS-4, VDS-3 **(OEM approved)**
- Renault VI RLD-4, RLD-3
- MTU Type 2.1
- Deutz DQC III-10 LA
- Ford WSS-M2C171-F1

TYPICAL PROPERTIES

Parameter (Test Method)	10W-30	15W-40	10W-40
Viscosity, Kinematic @ 40°C, cSt (ASTM D445)	74.66	116.30	90
Viscosity, Kinematic @ 100°C, cSt (ASTM D445)	11.30	15.40	13.60
Viscosity Index (ASTM D2270)	174	160	153
Flash Point, °C (°F) (ASTM D92)	210 (410)	210 (410)	210 (410)
Pour Point, °C (°F) (ASTM D97)	-45 (-49)	-38 (-36)	-45 (-49)
CCS Viscosity @ °C, cP (ASTM D5293)	4866 (-25)	4963 (-20)	5594 (-30)
Total Base Number, mg KOH/g (ASTM D2896)	10.5	10.5	10
HTHS @ 150°C, cP (ASTM D5481)	3.60	4.56	4.4
Sulfated Ash, % wt (ASTM D874)	0.97	0.97	0.97

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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.