



Agra Plus ESP

Synthetic Blend API CK-4 Diesel Engine Oil for Agricultural Applications

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DESCRIPTION

TRIAX Agra Plus ESP is a friction-modified and friction-optimized synthetic blend API CK-4 heavy duty diesel engine oil engineered for agricultural and off-road equipment. The formulation leverages a synergistic Molybdenum, Boron, and ZDDP additive system to deliver superior wear protection, oxidation resistance, and viscosity stability under the high-load, high-torque conditions typical of agricultural service, where engines routinely operate at sustained high-power output for extended periods. Designed for off-highway, high-torque applications operating in severe low-speed / heavy-load conditions using low (500 ppm) or ultra-low (15 ppm) sulfur diesel fuels, the advanced dispersant and detergent system handles the fuel, water, and dust contamination common in agricultural service, prevents sludge formation, keeps ash in suspension, and maintains engine cleanliness over extended drain intervals.

PERFORMANCE HIGHLIGHTS

- Up to 600 hours between oil changes in mechanically sound engines under good maintenance practices
- Up to 30% improved oxidation resistance vs. CK-4 requirements
- Exemplary turbo-charger protection — will not turn to sludge or coke on turbo bearings after shutdown
- Exceptionally high shear stability under sustained load to maintain lubrication in highly loaded components
- **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. major brands*
- **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**
- Designed to meet or exceed OEM requirements for diesel farm tractors and combines in severe service
- Outstanding thermal and oxidative stability — facilitates exceptionally long oil life
- High-retention, long-lasting TBN delivers acid neutralization and corrosion protection
- Faster turbo spooling, more responsive throttle, rapid and effortless cold starts
- Prolongs the life of DPF, SCR, and DOC aftertreatment systems in modern tractors and combines requiring a low-ash lubricant

*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

TRIAX Agra Plus ESP is purpose-built to be a suitable replacement for any and all 15W-40 agricultural OEM fluids, including those from John Deere, Kubota, New Holland, JCB, and Massey Ferguson.

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

- API CK-4, CJ-4, CI-4 Plus, CI-4, CH-4
- API SN, SM, SL
- ACEA E9-12
- Cummins CES 20086
- Volvo VDS-4, VDS-4.5
- Mercedes-Benz P228.31, P228.51
- Detroit Diesel 93K222, 93K218, 93K215, 93K214
- Mack EO-M Plus, EO-N Premium Plus 03/07, EOS 4.5
- Caterpillar ECF-2, ECF-3
- JASO DH-2
- MTU Type I, Type II, Type 2.1
- MAN 3575
- Allison C-4
- Renault RLD-3, RLD-4
- Ford WSS-M2C171-E, WSS-M2C171-F1
- Deutz DQC III-10 LA

TYPICAL PROPERTIES

Parameter (Test Method)	15W-40	10W-40
Viscosity, Kinematic @ 40 °C, cSt (ASTM D445)	106	90
Viscosity, Kinematic @ 100 °C, cSt (ASTM D445)	15.20	13.60
Viscosity Index (ASTM D2270)	151	153
Flash Point, °C (°F) (ASTM D92)	210 (410)	210 (410)
Pour Point, °C (°F) (ASTM D97)	-38 (-36)	-45 (-49)
CCS Viscosity @ °C, cP (ASTM D5293)	4963 (-20)	5594 (-30)
Total Base Number, mg KOH/g (ASTM D2896)	10.5	10
HTHS @ 150 °C, cP (ASTM D5481)	4.56	4.4
Sulfated Ash, % wt (ASTM D874)	0.97	0.97

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.