



TRIAx AGRA PLUS ESP 15W-40

Synthetic Blend CK-4 Moly Enriched Heavy Duty Diesel Engine Oil
FRICION MODIFIED - FRICION OPTIMIZED



Emission Systems
Protection



DESCRIPTION

TRIAx AGRA Plus ESP is late generation synthetic blend super heavy duty API CK-4 compliant diesel engine oil designed for superior performance and the protection of agricultural machinery. Contains Organic Moly Complex technology, a unique blend of Molybdenum and Boron, offering unparalleled protection against oxidation, nitration, bore polish and general wear in very demanding, high load work conditions. TRIAx Agra Plus ESP offers superior resistance to oxidation, up to 25% slower than most other 15W-40 lubricants, excellent viscosity stability, superior protection against nitration and is especially designed to withstand high load, high torque conditions, where engines have to performance at 90% power 90% of the time, conditions specific to agricultural applications. Its unique additive blend helps extend drain intervals, optimize functionality in both high and low temperature conditions.

Designed for off-highway, high torque applications operating in severe low speed/heavy load conditions using low (500ppm) or ultra low (15ppm) sulfur fuels.

What makes TRIAx AGRA PLUS ESP different than most other heavy duty engine oils and how is it more suited for agricultural applications than general lubricants? Unsurpassed Wear, Oxidation, Nitration Protection. This product is designed with a unique blend of base oil and is enriched with a state-of-the-art additive system, one of the most advanced anti-wear, oxidation inhibition and nitration prohibiting additives available anywhere in the world. The product contains Organic Molybde-num Complex, Boron, Nitrogen, Sulfur, Phosphorous as well as other chemical compounds designed to work together for performance far beyond what ordinary engine oils are capable of. Heavy duty diesel engines, especially in agricultural applications are extremely prone to fuel, water and dust contamination. TRIAx Agra can handle significant amounts of contamination without significantly modifying its properties. Top of the line dispersants and nitrogen rich detergent system prevent the formation of sludge, keep ash in suspension and will keep your engine clean .

TRIAx AGRA PLUS ESP IS RECOMMENDED AS DIRECT REPLACEMENT FOR ALL OEM SAE 15W-40 AGRICULTURAL ENGINE OILS MADE BY JOHN DEERE, CASE, CLASS, KUBOTA, KOMATSU, HITACHI, VOLVO, NEW HOLLAND AND MANY OTHERS

APPLICATIONS

This product is recommended for all heavy duty diesel agricultural and heavy duty off-road applications equipment such as John Deere, Komatsu, Belarus, Caterpillar, Deutz, Massey Ferguson, JCB, New Holland, Kubota, CASE, Deutz Allis, Deuts Fahr, CLAAS, White Farm, McCormick, Landini, Steiger and many others, where requirements call for an API CK-4, CJ-4, CI-4 Plus, ACEA E7 or E9 high performance motor oil.

TRIAx AGRA Plus ESP 15W-40 conforms to low emission standards required by the next generation farm and construction equipment manufacturers requiring a low ash, emission system protection lubricant and is compatible with interim Tier 4 engines such as John Deere & Case, with SCR Technology using Diesel Exhaust Fluid (DEF), as well as older engines. Recommended for all diesel engines including four-stroke naturally aspirated, turbocharged and supercharged diesel engines with Diesel Particulate Filters (DPF), Diesel Oxidation Catalysts (DOC), and Exhaust Gas Recirculation (EGR).

PERFORMANCE

This product is designed for the variable load work environments met in the agriculture industry to protect engines for at least 500 hours of operation in severe service. Drain intervals as long as 600 hours are possible in mechanically sound engines with oil analysis and proper equipment maintenance. For equipment in OEM warranty, use OEM recommended drain intervals.

- Exceptionally high shear stability to maintain lubrication in highly loaded components
- Designed to meet and exceed OEM requirements for all diesel farm tractors and combines in severe service.
- Unmatched wear protection, with CRP Moly and Boron technology, in virtually all heavy duty severe service applications
- Outstanding thermal and oxidative stability, facilitates exceptionally long oil life
- Exemplary turbo-charger protection in all work conditions - once the turbo shuts down the product will not turn to sludge or "fry" on the turbo bearings.
- Exceptional shear stability in under high loads
- State-of-the-art dispersal and detergent system preventing sludge
- High retention, long lasting TBN means unmatched acid and corrosion protection
- Excellent dry lubrication minimizes wear on engine cold starts
- Patented seal protection for all types of natural or synthetic seals
- Prolongs the life of Diesel Particulate Filters, SCR's and DOC's in modern tractors and combines, requiring a low ash lubricant.

TRIAx Agra Plus ESP 15W-40 will meet and exceed engine warranty requirements for agricultural equipment manufacturers such as John Deere, Komatsu, Belarus, Caterpillar, Deutz, Massey Ferguson, JCB, New Holland, Kubota, CASE, Deutz Allis, Deuts Fahr, CLAAS, White Farm, McCormick, Landini, Steiger and many others, where requirements call for a CJ-4, CI-4 Plus, ACEA E7 or E9 high performance motor oil or JDQ-78X and JDQ-78A Engine Tests.

YOUR NUMBER ONE CHOICE FOR AGRICULTURAL LUBRICANTS

Manufactured by TRIAx Lubricants LLC



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SPECIFICATIONS

- API CK-4, CJ-4, CI-4 PLUS, CI-4, CH-4
- API SN, SM, SL
- ACEA E9-12
- Mack EO-M Plus, EO-N Premium Plus 03, EO-O Premium Plus 07, & EOS 4.5
- Cummins CES 20086
- Volvo VDS-4, VDS-4.5
- Mercedes Benz P228.31, P228.51
- Detroit Diesel 93K222, 93K218, 93K215, 93K2143
- Caterpillar ECF2, ECF3
- JASO DH-2
- MTU Type I & II, MTU 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

Criteria Information	Test Method	Typical Value
Gravity, °API	ASTM D4052	27.12
Specific Gravity @ 60°F (15.6°C)	ASTM D4052	0.8747
Viscosity @ 40°C cSt	ASTM D445	116.50
Viscosity @ 100°C cSt	ASTM D445	15.40
Pour Point °C (°F)	ASTM D5950	-36°C (-33°F)
Flash Point °C (°F)	ASTM D92	219
Viscosity Index	ASTM D2270	146
Cold Cranking Simulator at (°C), cP	ASTM D5293	7,000 (-20)
MRV Vis, ASTM D 4684, CP at °C	ASTM D4684	20,950 @ -25C
High Temperature / High Shear Vis at 150°C, cP	ASTM D5481	4.50
MRV Yield Stress,, Pa at °C	ASTM D 4684	<35 @ -25C
Noack Volatility, % loss	ASTM D6375	8.5%
Color	ASTM D1500	4.50
Magnesium ppm	ASTM5185	560
Zinc ppm	ASTM D5185	1042
Phosphorus, ppm	ASTM D5185	965
Calcium, ppm	ASTM D5185	1390
Sulfur, ppm	ASTM D4951	2702
Boron, ppm - friction modifier	ASTM D5185	405
Molybdenum, - friction modifier	ASTM D5185	155
Sulfated Ash, ppm	ASTM D874	0.92
Nitrogen, ppm	ASTM D4629	1429
Foam Seq. I (Tendency/Stability), mL	ASTM D892 (Opt. A)	0/0
Foam Seq. II (Tendency/Stability), mL	ASTM D892 (Opt. A)	0/0
Foam Seq. III (Tendency/Stability), mL	ASTM D892 (Opt. A)	0/0
High Temperature Foaming, static foam	ASTM D6082 (Opt A)	0/0
TBN, mgKOH/g	ASTM D2896	10

HEALTH AND SAFETY INFORMATION

This product will not pose a safety hazard if good standards of personal and professional hygiene are maintain. Avoid contact with skin or eyes. If contact with used motor oil is imminent, use gloves impervious to oil. If skin contact occurs, wash immediately with soap and water. If eye contact occurs flush thoroughly with plenty of water. If irritation or redness persist. see a doctor immediately. DO NOT SWALLOW product or permit contact with food or materials which may come in contact with food or drink.

DO NOT DUMP THIS PRODUCT OR USED MOTOR OIL DOWN THE DRAIN, ON SOIL OR WATER. TAKE OIL TO A COLLECTION FACILITY SUCH AS GARAGE OR NEARBY OIL CHANGE BUSINESS.

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