



FLEET SUPREME ESP CK

*Moly & Boron Friction Modified / Optimized
Full Synthetic Heavy Duty Diesel Engine Oils*



**Emission Systems
Protection**

**PROTECTION
LIKE NOTHING
ELSE™**



DESCRIPTION

TRIAX FLEET SUPREME ESP CK is the latest technology in heavy duty engine oils, offering the latest in heavy duty diesel specifications, combined with state-of-the-art tested and true anti-wear technology. All TRIAX Fleet Supreme CK products are full synthetic lubricants developed to comply the latest diesel engine OEM requirements and offer backwards compatibility with virtually all heavy duty diesel engines, both North American and European UHPD (Ultra High Performance Diesel) engines requiring Euro 5 and Euro 5 low SAPS engine oils. TRIAX Fleet Supreme products are all formulated with our proprietary CRP (Continuous Regenerative Plating) technology) designed and HD Efficient Dynamics for friction optimization, reduction, unsurpassed fuel economy and unmatched wear protection. High efficiency detergent system and high retention TBN keep your engine ultra clean and prevent corrosion, acid and maximize overall engine protection to the highest degree.

APPLICATIONS

TRIAX Fleet Supreme CK-4 products are designed to be fully backwards compatible with CJ-4 and CI-4 plus applications. These lubricants are recommended for 2016 and newer heavy duty diesel engines found in commercial trucks, pickup trucks, construction equipment and agricultural equipment. TRIAX Fleet Supreme products are also recommended for the latest diesel engines from Volvo, Renault, Ford, Caterpillar, UHPD (ultra high performance diesel). Applications include heavy on road transportation, off-road, quarrying, mining including server service heavy duty.

PERFORMANCE CHARACTERISTICS

EXTENDED COMPONENT LIFE - continuous, effective shielding of engine parts under high frictional or thermal load effectively doubling their life. This type of plating is extremely resilient, significantly reducing engine wear and effectively doubling component life.

TURBO-CHARGER PROTECTION – Oil left inside the still hot turbocharger pools and having nowhere to go, is rapidly oxidized, becoming a thick sludge and carbon deposits which attach themselves to the turbocharger. TRIAX FLEET SUPREME ESP CK lubricants offer unmatched turbo-charger protection. The high oxidation resistance of the oil and its CRP composition prevents oil burning up inside the turbocharger once the vehicle has been turned off. This extreme resistance to temperature and oxidation virtually doubles turbo-charger life in heavy duty applications.

UP TO 30% IMPROVED OXIDATION vs CK-4 Requirements – significantly reduced oxidation vs industry standards for CK-4 approved products

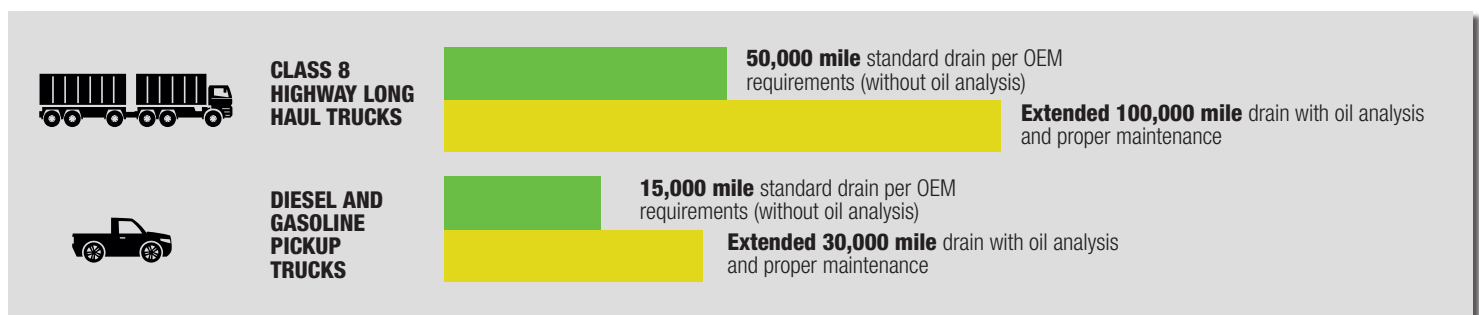
SIGNIFICANTLY EXTENDED DRAIN INTERVALS – TRIAX FLEET SUPREME ESP CK deliver outstanding drain intervals, 100,000 miles or more with oil analysis and proper maintenance, in class 8 transport trucks and triple the drain intervals of regular lubricants for diesel pickup trucks.

DRAMATICALLY LOWER STARTUP / COLD START WEAR – CRP Technology with Moly and Boron coats engine parts facilitating dry lubrication and permits effortless startup with dramatically reduced startup wear.

UNPARALLELED 40% IMPROVEMENT IN SLUDGE / ENGINE DEPOSITS – Unique dispersant and detergent technology exceeds CAT ECF-3 performance by ~40% in deposit control in CAT C13 Engine Test. Keeps pistons clean for longer engine life and reduced oil consumption

FORD SPECIFICATION COMPLIANT– TRIAX FLEET SUPREME ESP CK engine oils in 5W-40, 15W-40 and 10W-30 viscosity grades exceed the Ford required specification for CK-4 lubricants - FORD WSS-M2C171-F1

DRAIN INTERVALS CAPABILITIES





FLEET SUPREME ESP CK

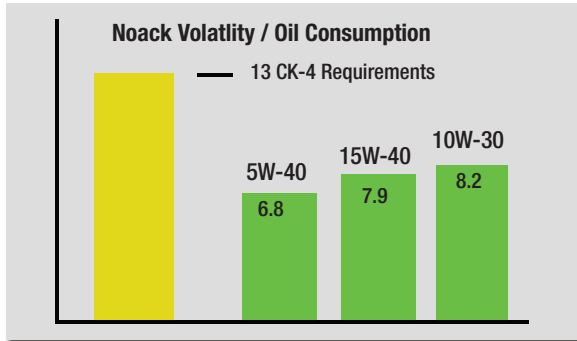
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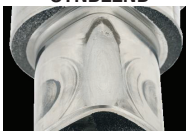



Emission Systems Protection

PROTECTION LIKE NOTHING ELSE™

NOACK VOLATILITY / EVAPORATION UNDER STRESS



WEAR COMPARISON VS INDUSTRY STANDARD CJ-4

	TRIAx CK-4 FLEET SYN & SYNBLEND	CJ-4 INDUSTRY AVERAGE	RESULT
CAMS	 34.4µm	 55.4µm	38% WEAR REDUCTION
TAPPET	 56 mg	 95 mg	41% WEAR REDUCTION

PERFORMANCE SUMMARY

- Complete protection for diesel and gasoline emission control systems such as Exhaust Gas Re-Circulation systems (EGR), Selective Catalytic Reduction (SCR) systems and Diesel Particle Filters (DPF).
- Complete compatibility with virtually all major heavy duty diesel engine manufacturers
- **Up to 100,000 miles of complete protection per oil change in on highway semi trucks.** (may vary based on engine condition)
- Outstanding friction modifying and wear reducing properties, up to 65% drop in friction coefficient vs industry standards
- Significant improvement in overall engine component wear
- Designed for heavy duty trucks for maximum longevity and protection
- State-of-the-art detergent and dispersant package for outstanding deposit control preventing ash clumping and deposits.
- Excellent fluid life and oxidation control, with superior stay-in-grade characteristics
- Permits "dry" lubrication at engine startup and during cold winter months, nearly eliminating engine startup wear and noise
- Permits quick-fill lubrication flow during cold weather start-up, down to -42 C.
- High retention TBN (slow degradation) which provides improved, long term acid neutralization and corrosion protection.
- Provides year-round engine protection even in the most severe operating conditions
- Outstanding stay-in-grade shear stability

PRODUCT 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
- MB 228.31
- DDC 93K222
- CATERPILLAR ECF-3
- Chrysler MS 10902 / 12991
- VOLVO VDS-4.5, VDS-4, VDS-3
- RENAULT VI RLD-4, RLD-3
- MTU TYPE 2.1
- DEUTZ QDC III-10 LA
- FORD WSS-M2C171-F1
- MAN 3575

CHEMICAL INFORMATION

	10W-30	15W-40	5W-40	5W-30
Specific Gravity@ 60°F	0.8678	0.8617	0.8678	0.8678
Viscosity, Kinematic				
cSt at 40°C	74.66	103.4	92.20	69.20
cSt at 100°C	11.1	15.30	15.20	11.84
Viscosity Index	174	160	182	176
Flash Point, °C (°F)	210 (410)	210 (410)	210 (410)	210 (410)
Pour Point, °C (°F)	-42 (-44)	-36 (-32.8)	-42 (-43.6)	-42 (-44)
Cold Crank, cP at -25°C	5,940	3221	5,240	5,940
Color	5.5	5.5	5.5	5.5
TBN	10	9	10	10
Molybdenum (ppm)	142	142	152	142
Boron (ppm)	405	405	453	405
Nitrogen (ppm)	1428	1428	1320	1428
Sulfur (ppm)	2702	2702	3270	2702
Sulfated Ash (ppm)	0.97	0.97	0.97	0.97
Phosphorous (ppm)	965	1182	1131	965
Zinc (ppm)	876	890	876	876
NOACK Volatility % loss	8.2	7.9	6.8	10

ACTUAL PRODUCTS MAY HAVE SMALL VARIATIONS IN THESE NUMBERS, WHICH IS NORMAL FOR THE MANUFACTURING PROCESS AND DO NOT AFFECT PERFORMANCE