



Maxtron[®] DEO

Synthetic Blend Diesel Engine Oil CK-4/SN

General Description

Maxtron[®] DEO synthetic blend diesel engine oils are engineered to protect all Tier IV and low emission engines and their exhaust after treatment systems. This robust formulation is also designed to provide additional protection for older engines.

Maxtron DEO is designed for longer engine life through enhanced oxidation performance in fleet, construction and agriculture equipment under the most extreme conditions. It has undergone thousands of hours of engine testing and millions of miles of field testing to give superior backward-compatible and unsurpassed engine protection.

Maxtron DEO is formulated with an industry leading 5 SSI advanced radial polymer, EnduroVis[™]. This superior radial polymer provides best-in-class shear stability and protection against viscosity loss due to mechanical and chemical stress in heavy duty diesel engines. This enhancement keeps critical engine components clean from deposit build-up, resulting in improved fuel economy and protection of critical engine parts.

Expect excellent performance in these applications:

- Four-stroke naturally aspirated and turbocharged diesel engines.
- All Tier IV Final engines.
- Excellent backward compatibility, suitable to all pre 2010 engines.
- When using ultra low sulfur diesel fuel.

Features and Benefits

- **Oxidation Prevention:** Advanced new anti-oxidant technology prevents oil degradation and thickening under high operating temperatures, retaining proper viscosity and wear protection.
- **Oil Durability:** This oxidation system is specially blended to provide longer oil and engine life. Reduced air entrainment also leads to stronger film strength.
- **Exceptional Soot Control:** Proven soot control that exceeds the requirements of both new and older engines. Controlling and dispersing soot is critical for reducing engine wear and extending engine life.
- **TBN Retention:** A high Total Base Number (TBN) and excellent TBN retention means that more combustion contaminants (deposits, soot, acids) can be held in suspension and neutralized during the course of a drain interval.
- **Volatility Control:** Less oil volatility provides reduced consumption, lower deposits, and reduced oil into the emission system.
- **Enhanced with EnduroVis[™]:** This new radial polymer technology is engineered to retain its form as it moves through the engine, providing exceptional shear stability and essentially no viscosity breakdown under severe engine stress and heavy loads.
- **Deposit and Consumption Control:** Engine and field testing confirms an excellent reduction in deposits and oil consumption leading to longer engine life, emission and (DPF) system life.
- **Reserve Protection:** Maxtron DEO features the extra reserve built into the oil. This reserve capacity suspends additional soot, neutralizes additional acids and reduces wear for longer engine life.
- **Extended Drain:** Maxtron DEO is capable of extended drain service with new and older engines using today's fuels. This should be determined with a regular LubeScan[®] used oil analysis.

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Typical Applications

Maxtron DEO is designed to exceed the newest API and OEM service categories:

Mack EOS-4.5, EO-O Premium Plus, EO-N, **Volvo** VDS-4.5, VDS-4, VDS-3, **Cummins** CES20086, CES20081, (and all prior CES Specifications)

Caterpillar ECF-3, ECF-2, **Detroit Diesel** DFS 93K222, 93K218, **Daimler MB** 228.31*, **Renault** RLD-4, RLD-3*, **MAN** M-3575*, **ACEA** E9-2012, E7-08/E9-08, **MTU** Category 2.1*, **Ford** WSS-M2C171-F1

*SAE 10W-30 and official OEM claims are formulation specific.

Typical Customers

Operators of heavy duty diesel engines:

- Truck fleets with newer low emission compliant engines or older engines.
- Construction diesel engines operating under heavily loaded conditions.
- Agricultural diesel engines operating in severe conditions.
- Light Duty Diesel Trucks
- Stationary engines, irrigation, and standby generators.
- Ag OEMs including John Deere, Case-IH, AGCO and Mahindra.

Typical Properties

SAE Grade	15W-40	10W-30
API Service	CK-4, CJ-4, CI-4 Plus, CI-4, / SN	CK-4, CJ-4, CI-4 Plus, CI-4,
API Gravity/Density lbs/gal	31.4/7.33	32.4/7.29
Viscosity @ 40°C, cSt	112.6	81.9
Viscosity @ 100°C, cSt	15.2	12.2
Viscosity Index	141	145
Pour Point, °F (°C)	-33 (-36)	-44 (-42)
MRV-TP1, cP	18600 @ -25°C	20100 @ -30°C
CCS Viscosity, cP	5210 @ -20°C	6,070 @ -25°C
Total Base No. (TBN)	10	10
HTHS Viscosity, mPa-s ASTM D4683	4.1	3.5
Sulfated Ash Wt. %	0.99	0.99

The typical properties listed reflect the general characteristics of the product, and are not manufacturing specifications. Normal batch-to-batch variations should be expected.

Health & Safety

A complete safety data sheet is available by calling 1-651-355-8438 or visit cenex.com/sds-library.