

# Maxtron® Enviro-EDGE®



## Full-Synthetic Diesel Engine Oil 5W-40, CK-4/SN

### General Description

Maxtron® Enviro-EDGE® is an advanced full-synthetic 5W-40 diesel engine oil. This premium heavy-duty diesel engine oil is engineered for optimal fuel economy, wide temperature range performance and superior protection of all Tier IV and newer model year low-emission engines and exhaust aftertreatment systems. Maxtron Enviro-EDGE has a unique, backward-compatible formulation that provides additional protection for older engines.

Enhanced, industry-leading antioxidant performance and aeration protection give Maxtron Enviro-EDGE the highest level of field tested durability for longer engine life in fleet, construction, and agriculture equipment under severe service and extreme temperature conditions. This performance is supported by extensive engine and field testing.

Maxtron Enviro-EDGE 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 buildup, 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 and newer low-emission engines with exhaust after treatment devices.
- Pre-Tier IV engines specifying an older API or OEM oil performance category.
- When using ultra low sulfur diesel fuel.
- When the manufacturer recommends the use of 5W-40 diesel engine oils.

### Features and Benefits

- **Oil Durability:** This full-synthetic oil includes advanced oxidation protection to provide longer oil and engine life within the increased thermal demands of today's engines.
- **Fuel Economy:** Demonstrated in engine and road tests to provide up to 1.2% improved fuel economy, compared to 15W-40 oils.
- **Oil Pumpability:** Exceeds the pumpability requirements of 5W-40 oils, providing improved lubrication to critical engine parts which reduces wear during cold temperature startups.
- **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.
- **Wear Control:** Provides improved wear control over previous performance classifications and exceeds the requirements of the newest industry tests.
- **Exceptional Soot and Deposit Control:** Maxtron Enviro-EDGE demonstrates outstanding soot control that exceeds the requirements of both new and older engines, which is critical for reducing engine wear and extending engine life.
- **TBN Retention:** A high Total Base Number (TBN) and excellent TBN retention means more combustion contaminants (deposits, soot, acids) can be neutralized during the course of a drain interval.
- **Volatility Control:** Less oil volatility provides reduced consumption, lower deposits, and a reduced amount of oil in the emission system.
- **Extended Drain:** Maxtron Enviro-EDGE is capable of extended drain service with new and older engines. This should be determined by using the LubeScan® used oil analysis.

# Maxtron<sup>®</sup> Enviro-EDGE<sup>®</sup>

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### Typical Applications

Maxtron Enviro-EDGE 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** CES 20086, CES 20081, **Caterpillar** ECF-3, EC-/2, **Detroit Diesel** DFS 93K222, DFS 93K218, **Daimler MB** 228.31, **Renault** RLD-4, RLD-3, **MAN** M-3575, **MTU** Category 2.1, **ACEA** E9-2012, E7, **Ford** WSS-M2C171-F1

### Typical Customers

Operators of heavy duty diesel engines:

- Fleets, contractors, agriculture.
- On- and off-highway engines operating in extreme temperatures.
- Diesel passenger cars and light trucks.

### Typical Properties

SAE Grade	5W-40
API Service	CK-4, CJ-4, CI-4 Plus, CI-4, /SN
API Gravity/Density lbs./gal	34.1 / 7.12
Viscosity @ 40°C, cSt	92
Viscosity @ 100°C, cSt	15.2
Viscosity Index	172
Pour Point, °F (°C)	-49 (-45)
MRV-TP1, cP	27,000 @ -35°C
CCS Viscosity, cP	5,930 @ -30°C
Total Base No. (TBN)	11.0
HTHS Viscosity, mPa-s ASTM D4683	4.0
Sulfated Ash Wt. %	1.1

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](http://cenex.com/sds-library).