



## Synthetic Blend Engine Oils

Eco Ultra® Synthetic Blend Engine Oils are premium quality, heavy-duty crankcase oils. They have been formulated with highly re-refined Group II base oils which counteract acids, varnishes and deposits to extend engine life and maintain peak efficiency. The CK-4 technology provides improved soot control, wear protection, pumpability, and protection from thermal and oxidative breakdown. These products are manufactured with technologies to provide maximum performance in both diesel and gasoline engine service.

Eco Ultra Synthetic Blend Engine Oils provide outstanding protection against scuffing of highly loaded cams, hydraulic lifters and other valve train components, resulting in reduced engine wear and increased engine efficiency and power. These products are designed to keep high-output, low emission engine designs clean and working efficiently. Eco Ultra Synthetic Blend Engine Oils are an exceptional choice for fleets of diesel engines requiring an API Service Classification CK-4 and exceed the minimum requirements of the category.

<u>PROPERTY</u>	<u>ASTM TEST METHOD</u>	<u>SAE 10W-30</u>	<u>SAE 15W-40</u>
Viscosity @ -25°C, cP	D-5293	6200	N/A
Viscosity @ -20°C, cP	D-5293	N/A	5500
Viscosity @ 40°C, cSt	D-445	80.00	110.00
Viscosity @ 100°C, cSt	D-445	12.00	15.10
Viscosity Index	D-2270	145	145
Flash Point, COC, °C	D-92	221	232
Flash Point, COC, °F	D-92	430	450
Pour Point, °C	D-97	-36	-33
Pour Point, °F	D-97	-33	-27
Color	D-1500	3.0	3.0
Gravity, °API	D-287	30.8	30.0
Sulfated Ash, %	D-874	1.0	1.0
Zinc, %	D-4951	0.13	0.13
Total Base Number (TBN)	D-2896	10	10

Meets or exceeds the following tests and requirements:

- API Service Classifications – CK-4, CJ-4, CI-4 Plus, CI-4 (10W-30, 15W-40); SN, SM, SL (15W-40)
- Caterpillar – ECF-2, ECF-3, C-13 (10W-30, 15W-40)
- Mack – EOS-4.5, EO-O Prem Plus '07, EO-N, T-11, T-12 (10W-30, 15W-40)
- Cummins – CES 20081, CES 20086 (10W-30, 15W-40)
- Detroit Diesel – DFS 93K218, DFS 93K222 (10W-30, 15W-40)
- General Motors – 6.5L (RFWT) (15W-40)
- Navistar (International Harvester Company) – HEUI Foam (15W-40)
- Volvo – VDS-3, VDS-4, VDS-4.5 (10W-30, 15W-40)
- Global – DHD-1 (10W-30, 15W-40)
- JASO – DH-2 (10W-30, 15W-40)
- Mercedes Benz – P228.3 (15W-40)
- Daimler – MB 228.31
- Renault – RLD-4, RLD-3 (10W-30, 15W-40)
- ACEA – E7-04, E2, E4, E9-2012 (10W-30, 15W-40)
- John Deere – Plus-50
- Ford – WSS-M2C171-E, WSS-M2C171-F1 (10W-30, 15W-40)

NOTE: Certain tests apply to specific SAE grades.