

## **Premium Engine Oils**

Eco Ultra® Premium Engine Oils are synthetic blend, premium quality, heavy duty crankcase oils. They have been formulated with high quality Group III and 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. Eco Ultra Premium Engine Oils provide outstanding soot dispersion capabilities in extended service intervals.

Eco Ultra Premium 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 Premium Engine Oils are an exceptional choice for mixed fleets of diesel engines requiring an API Service Classification CK-4.

PROPERTY	ASTM TEST	SAE	SAE
	METHOD	10W-30	<u>15W-40</u>
Viscosity @ -25°C, cP	D-5293	6000	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	232	232
Flash Point, COC, °F	D-92	450	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	31.0	30.0
Sulfated Ash, % Zinc, %	D-874	1.0	1.0
	D-4951	0.13	0.13
Total Base Number (TBN)	D-2896	10	10

Meets or exceeds the following tests and requirements:

API Service Classification – CK-4, CJ-4, Cl-4 Plus, Cl-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 (10W-30, 15W-40)

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)

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