Fleet Supreme EC® Diesel Engine Oil

Fleet Supreme EC (Emission Compatible) Diesel Engine Oil is an API CJ-4 engine oil developed for use in four-stroke cycle diesel engines designed to meet 2007 and later EPA on-highway exhaust emissions standards. It is specially formulated for compatibility with exhaust aftertreatment systems using diesel particulate filters (DPFs), diesel oxidation catalysts (DOCs) and/or selective catalytic reduction (SCR). It is backward serviceable for use in pre-2007 diesel engines, and may be used in mixed fleets with both diesel and gasoline-fueled vehicles.

Fleet Supreme EC is designed for use in mixed fleets with both on-highway and off-road equipment operating in varying climates and under varying loads and service conditions. It has excellent soot dispersancy to protect against soot-induced oil thickening and abrasive wear, and excellent oxidation resistance to help minimize deposit formation. The low-ash formulation protects exhaust catalysts on low-emission engines and helps prolong DPF life.

Fleet Supreme EC meets or exceeds the performance requirements of API Service Categories CJ-4 and SN, and is approved under the latest OEM specifications for use in low-emission diesel engines. It is backward serviceable for use where earlier API “C” category engine oils, or the concurrent earlier OEM specifications, are specified. It is formulated for use in diesel engines operating on diesel fuels with sulfur content up to 500 ppm. However, for applications not using Ultra-Low Sulfur Diesel (ULSD), consult the engine manufacturer for recommended service interval.

Applications
- On-highway diesel trucks equipped with EGR and exhaust aftertreatment systems to meet 2007/2010 emissions standards
- Older diesel equipment with conventional, non-EGR engines or ACERT engines
- Off-highway construction, earth moving and mining equipment
- Mixed fleets with diesel and gasoline-fueled vehicles

Fleet Supreme EC is licensed or OEM-certified for:
- API Service CJ-4, CI-4 with CI-4 PLUS, CI-4, CH-4, SN
- Cummins CES 20081 (SAE 15W-40)
- Detroit Diesel DFS 93K218 (SAE 15W-40)
- Mack EO-O Premium Plus (SAE 15W-40)
• Mercedes-Benz Sheet 228.31 (SAE 15W-40)
• MTU MTL 5044 Type 2.1 (SAE 15W-40)
• Renault VI RLD-3 (SAE 15W-40)
• Volvo VDS-4 (SAE 15W-40)

Fleet Supreme EC meets or exceeds the requirements of:

• ACEA E9-08, E7-04 (SAE 15W-40)
• Caterpillar ECF-3, ECF-2, ECF-1-a
• Chrysler MS-10902 (SAE 15W-40)
• Ford WSS-M2C171-E
• Mack EO-M Plus
• Diesel engines manufactured by OEMs not listed above, where the OEM specifies API CJ-4 engine oil

**Features/Benefits**

• Excellent protection for newer low-emission diesel engines and older diesel engines
• Specially formulated to protect exhaust aftertreatment systems
• Protects against particulate filter plugging
• Excellent soot control for protection against abrasive wear and soot-induced oil thickening
• Excellent resistance to viscosity and thermal breakdown at high temperatures
• Protects against sludge and varnish formation
• Protects against rust, bearing corrosion and wear
• Good resistance to foaming and aeration
# Fleet Supreme EC® Diesel Engine Oil

## Typical Properties

<table>
<thead>
<tr>
<th></th>
<th>SAE Grade</th>
<th>10W-30</th>
<th>15W-40</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>Specific Gravity @ 60°F</td>
<td>0.870</td>
<td>0.880</td>
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<tr>
<td></td>
<td>Density, lbs/gal @ 60°F</td>
<td>7.24</td>
<td>7.33</td>
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<tr>
<td></td>
<td>Color, ASTM D1500</td>
<td>4.0</td>
<td>4.0</td>
</tr>
<tr>
<td></td>
<td>Flash Point (COC), °C (°F)</td>
<td>227 (441)</td>
<td>227 (441)</td>
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<tr>
<td></td>
<td>Pour Point, °C (°F)</td>
<td>-45 (-49)</td>
<td>-38 (-36)</td>
</tr>
<tr>
<td>Viscosity, Kinematic</td>
<td>cSt @ 40°C</td>
<td>80.0</td>
<td>114</td>
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<td></td>
<td>cSt @ 100°C</td>
<td>12.0</td>
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<tr>
<td>Viscosity Index</td>
<td></td>
<td>145</td>
<td>139</td>
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<tr>
<td>Cold Cranking Viscosity, cP @ (°C)</td>
<td>6,200</td>
<td>6,500</td>
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<tr>
<td>High-Temp/High-Shear Viscosity, cP @ 150°C</td>
<td>3.6</td>
<td>4.3</td>
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<tr>
<td>Sulfated Ash, ASTM D874, wt %</td>
<td>1.00</td>
<td>0.97</td>
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<tr>
<td>Total Base Number (TBN), ASTM D2896</td>
<td>8.5</td>
<td>8.4</td>
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<tr>
<td>Zinc, wt %</td>
<td>0.123</td>
<td>0.121</td>
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## Health and Safety Information

For recommendations on safe handling and use of this product, please refer to the Material Safety Data Sheet via [http://w3apps.phillips66.com/NetMSDS](http://w3apps.phillips66.com/NetMSDS).