Sinclair Synthetic Premium Heavy Duty Engine Oil SAE 5W-40 is our most advanced premium diesel oil. It exceeds API CJ-4 as required by model-year 2007 and newer diesel engines equipped with advanced emission control systems. Fully backward compatible, it provides significant additional protection for older engines.

Synthetic 5W-40 withstands the stress of heat, soot, and acids far better than conventional oils to help prevent deposits, wear and corrosion. It’s high quality synthetic base oil allows it to pump and flow faster to provide exceptional cold-weather starting and maximum fuel efficiency. Formulated with a highly shear-stable viscosity index improver and fortified with advanced detergents and soot dispersants, 5W-40 resists breakdown over extended drain intervals and offers up to 50 percent more engine wear protection compared with previous oil categories.

Sinclair Premium Plus LE Engine Oil 10W-30 EF CJ-4 is a premium diesel oil that meets the most stringent engine oil specifications available in today’s marketplace. It meets or surpasses most domestic and imported heavy-duty truck manufacturers’ warranty requirements including the new requirements for Exhaust Gas Recirculation (EGR) and new low emission engines with ULSD (2007 engines and later) equipped with Diesel Particulate Filters (DPF’s). It provides excellent oil consumption control, protection against low-temperature and high-temperature deposits, and provides the highest level of wear protection.

**APPLICATIONS**

- Where API CJ-4, CI-4, CH-4, CG-4, CF-4, CF-2, CF, CE, CD, CD or CC oils are recommended.
- Where API SN, SM, SL, SH, SG and SF oils are recommended.
- Recommended for use in Caterpillar, Cummins, Detroit Diesel**, Mack, Navistar, Volvo and many imported diesel engines.
- Recommended for 2007 and newer engines with advanced emission control systems engines with Diesel Particulate Filters (DPF’s), Exhaust Gas Recirculation (EGR), and Nitrous Oxides (NOx) Catalysis; pre-2007 engines using Ultra-Low Sulfur Diesel (ULSD) or Low Sulfur Diesel (LSD) extreme operating conditions including long hauls, heavy loads and all weather conditions.
- Perfect Product to use in Low Temperature applications due to the tremendous 5W pumpability of this oil in very cold conditions.
- The superior frictional properties of this oil provides improved fuel economy.

**PERFORMANCE**

- Extended service intervals.
- Outstanding oil consumption control.
- Superior performance over a wide range of fuel sulfur content.
- Excellent soot handling capability.
- Superior deposit control.
- Excellent wear protection.
- Superb oxidation stability.

**SPECIFICATIONS/APPROVALS**

- API CJ-4, CI-4 PLUS, CJ-4, CH-4, CG-4, CF and SM, SL
- MACK
- Caterpillar
- Cummins
- Detroit Diesel
- MAN
- Mercedes Benz
- MTU
- Volvo
- JASO
- Renault
- ACEA
- Allison
- ECF-3, ECF-2, ECF-1-a
- CES 20081, 20077, 20076
- 93K215, 93K215, 93K216
- 3275
- 228.31
- Type I, Type II
- VDS-4, VDS-3, VDS-2
- 9H-2
- RLD-3
- E9-08, E7-04, E4, E2
- C-4
# HEAVY DUTY ENGINE OILS

## TYPICAL PHYSICAL PROPERTIES

### METHOD

<table>
<thead>
<tr>
<th>Viscosity Grade</th>
<th>METHOD</th>
<th>HD SAE 5W-40 CJ-4</th>
<th>HD SAE 10W-30 CJ-4</th>
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<tbody>
<tr>
<td>Gravity, °API</td>
<td>ASTM D2477</td>
<td>33.5723</td>
<td>31.40</td>
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<tr>
<td>Specific Gravity @ 60°F (15.6°C)</td>
<td>ASTM D4052</td>
<td>0.8572</td>
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<td>Viscosity @ 40°C cSt</td>
<td>ASTM D445</td>
<td>87.75</td>
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<td>Viscosity @ 100°C cSt</td>
<td>ASTM D445</td>
<td>14.76</td>
<td>11.93</td>
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<tr>
<td>Viscosity Index</td>
<td>ASTM D2270</td>
<td>177</td>
<td>150</td>
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<tr>
<td>High Temperature / High Shear Vis at 150°C, cP</td>
<td>ASTM D4683</td>
<td>3.5</td>
<td>3.5</td>
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<tr>
<td>Noack Volatility, % loss</td>
<td>ASTM D5800</td>
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<td>14.6</td>
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<tr>
<td>Color</td>
<td>ASTM D1500</td>
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<tr>
<td>Zinc, wt. %</td>
<td>ASTM D5185</td>
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<td>Phosphorus, wt. %</td>
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<tr>
<td>Calcium, wt. %</td>
<td>ASTM D5185</td>
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<td>Sulfur, wt. %</td>
<td>ASTM D4951</td>
<td>0.314</td>
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<tr>
<td>Magnesium, wt. %</td>
<td>ASTM D5185</td>
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<td>Sulfated Ash, wt. %</td>
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<tr>
<td>Nitrogen, wt. %</td>
<td>ASTM D4629</td>
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<tr>
<td>Pumping Viscosity at (°C), cP</td>
<td>ASTM D4684</td>
<td>24,113 (-35)</td>
<td>24,900 (-30)</td>
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<td>TBN, mgKOH/g</td>
<td>ASTM D2896</td>
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<td>10</td>
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</tbody>
</table>

### TYPICAL RESULTS

**Description** | **Pack Size** | **Part #** | **Each UPC** | **Case UPC** | **Case Dimensions** | **Case Cube / Pallet Cube** | **Case Weight / Pallet Weight** | **Pallet Stack** |
--- | --- | --- | --- | --- | --- | --- | --- | ---|
HD SAE 5W-40 CJ-4 | 6/1 Gallon | 846-007 | 0 14168-01750 1 | 0 14168-01750 3 | L 15.750 x W 13.125 x H 12.750 | 1.525 / 62.222 | 47.956 / 1726.409 | 36 Cases (4 layers of 9) |
HD SAE 5W-40 CJ-4 | 55 Gallon | 846-003 | 0 14168-01749 7 | N/A | L 23.000 x W 23.000 x H 35.000 | 10.715 / 44.444 | 442.173 / 1764.529 | 4 Drums |
HD SAE 10W-30 CJ-4 | 55 Gallon | 583-003 | 0 14168-01754 1 | N/A | L 23.000 x W 23.000 x H 35.000 | 10.715 / 44.444 | 441.132 / 1764.529 | 4 Drums |
HD SAE 10W-30 CJ-4 | Bulk | 583-001 | N/A | N/A | N/A | N/A | N/A | N/A |