**Premium Plus 15w40 HD CK-4 Engine Oil**

STARFIRE Premium Plus 15W40 HD CK-4 Engine Oil combines premium base stocks with next-generation additive technology. It is specifically engineered for heavy duty diesel and gasoline engines operating under all service conditions, including today’s emission controlled engines with EGR and diesel particulate filters using Ultra-Low Sulfur Diesel Fuel (ULSD) and Low Sulfur Diesel (LSD). It meets or exceeds nearly all the next generation OEM specifications, including those from Ford, Cummins, Detroit Diesel, Mack, Volvo, Renault, Mercedes, MAN and Deutz. It can also be recommended for leading heavy equipment manufacturers such as John Deere, Kubota, Massey Ferguson, JJ Case, Allis Chalmers, and International Harvester.

This next-generation low-ash technology provides improved wear protection, deposit and soot control, and improves oil consumption by neutralizing combustion by-products that cause harmful deposits. STARFIRE Premium Plus 15w40 HD CK-4 Engine Oil provides extended drain capabilities that prevents viscosity loss from shearing and reduces friction, leading to longer engine life and improved fuel economy. Its high film strength makes STARFIRE Premium Plus 15w40 HD CK-4 Engine Oil suitable for both on and off-road driving conditions. It can be recommended for all new engines requiring CK-4 fluid and are backward compatible with API CJ-4, CI-4 PLUS, CI-4, and CH oils.

**APPLICATION**

- API CK-4, CJ-4, CI-4 Plus, CI-4, CH-4, CD, SN, SM, SL, SJ, SH, SG
- ACEA E7-12, E9-12
- Caterpillar ECF-3, ECF-2, ECF-1a
- Cummins CES 20081, 20086
- DAF
- Detroit Fluids Specification (DFS) 93K222, 93K218, 7SE-270, 2000/4000 Category 1
- Deutz DQC III-10-LA
- Ford WSS-M2C171-F1
- Global Specification DHD-1
- Inveco
- JASO DH-1 and DH-2
- Mack EOS 4.5, EO-O Premium Plus-07
- MAN 3575, 271, 3275
- Mercedes Benz MB 228.3, 228.31, 228.5, 229.1, 229.5
- MIL-PRF-2104H
- MTU Type II
- Navistar
- Renault RLD-4, RLD-3
- Scania LD-F, LDF-2
- Volvo VDS-4.5, VDS-4

**TYPICAL PROPERTIES**

<table>
<thead>
<tr>
<th>SAE Grade</th>
<th>15W40</th>
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<tbody>
<tr>
<td>Pour Point, °C</td>
<td>-33</td>
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<tr>
<td>Viscosity: cSt @ 40°C</td>
<td>119</td>
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<tr>
<td></td>
<td>cSt @ 100°C</td>
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<tr>
<td>Viscosity Index</td>
<td>132</td>
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<tr>
<td>Cold Crank Simulator, cP</td>
<td>6333 (-21°C)</td>
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<tr>
<td>Density (lb/gal)</td>
<td>7.31</td>
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<td>Color</td>
<td>L4</td>
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