CAM2 Synthetic Blend HD CK-4/SN combines premium base stocks with next-generation additive technology to produce our most fuel efficient cleanest burning, low-ash heavy duty engine oil to date. 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.

Super HD CK-4/SN Synthetic Blend motor oils protect engines with Emission Controls, EGR engines, as well as older engines. It is even recommended by leading heavy equipment manufacturers such as John Deere, Kubota, Massey Ferguson, JJ Case, Allis Chalmers, and International Harvester.

This ground breaking low-ash technology provides improved wear protection, deposit and soot control, and improves oil consumption by neutralizing combustion by-products that cause harmful deposits. Super HD CK-4/SN is an extended drain capable engine oil that prevents viscosity loss from shearing and reduces friction leading to longer engine life and improved fuel economy.

Its high film strength makes Super HD CK-4 fluids suitable for both on and off-road driving conditions. It can be recommended for new engines requiring CK-4 fluid and is backward compatible with API CK-4, CJ-4, CI-4 PLUS, CI-4, and CH oils.

Features
- Low-ash formulation extends catalyst life
- 2x better corrosion control than the new API standards
- Protects cylinders up to 80x more than Daimler standards
- Improved protection from thermal and oxidative breakdown
- Excellent anti-wear, anti-foam, and anti-rust properties
- Up to 63% better soot control than previous CJ-4 formulations
- Protects piston rings up to 2.5x better than its CJ-4 predecessor
- Extremely shear stable preventing viscosity loss
- Compatible with both diesel and gasoline engines
- Improved TBN retention over previous diesel engine oils

Applications
CAM2 Synthetic Blend Super HD CK-4/SN meets or exceeds the following OEM specifications:

- API CK-4, CJ-4, CI-4+, CI-4, CH-4
- ACEA E9-16
- CUMMINS CES20086³, 81
- CAT ECF-3, ECF-2
- DETROIT DIESEL DFS93K222³, 218
- FORD POWERSTROKE (WSS-M2C171-F1)
- JOHN DEERE Tier IV Engines
- MACK EOS-4.5
- VOLVO VDS-4.5
- ALLISON TES-439
- RENAULT RLD-4
- MB 228.31
- MAN 3275 / 3575
- MTU 2.1
- DEUTZ DQC III-10 LA
- GLOBAL DHD-1
- JASO DH-2

¹ Relative performance based on results from the Cummins ISM engine test run with SAE 10W-30, low HTHS.
² Relative performance based on results from the OM501LA engine test run with SAE 10W-30, low HTHS.
³ Approval obtained.
### TYPICAL CHARACTERISTICS

<table>
<thead>
<tr>
<th>Product Code</th>
<th>262</th>
<th>320</th>
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<tbody>
<tr>
<td>SAE Grade</td>
<td>10W-30</td>
<td>15W-40</td>
</tr>
<tr>
<td>Viscosity @ 40°C, cSt</td>
<td>81.6</td>
<td>118</td>
</tr>
<tr>
<td>Viscosity @ 100°C, cSt</td>
<td>11.85</td>
<td>15.4</td>
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<tr>
<td>Viscosity Index</td>
<td>139</td>
<td>140</td>
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<tr>
<td>Sulfated Ash, m%</td>
<td>1.0</td>
<td>1.0</td>
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<tr>
<td>Pour Point, °C</td>
<td>-42</td>
<td>-38</td>
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<tr>
<td>HTHS @ 150°C</td>
<td>3.4</td>
<td>4.0</td>
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<tr>
<td>Flash Point, °C (COC)</td>
<td>220</td>
<td>229</td>
</tr>
<tr>
<td>Total Base Number, mg KOH/g</td>
<td>9.7</td>
<td>9.7</td>
</tr>
<tr>
<td>Phosphorous, m%</td>
<td>0.113</td>
<td>0.113</td>
</tr>
</tbody>
</table>

The above characteristics are typical of current production. While production will conform to CAM2's specification, slight variations may occur and do not affect performance.

For more information, contact your CAM2 Representative or visit our website @ [www.CAM2.com](http://www.CAM2.com)

**Special handling, notices or warnings**
- Avoid contact with eyes
- Avoid prolonged or repeated contact with skin
- DO NOT INDUCE VOMITING