



## Highway SAE 5W-30

### Multigrade engine oil

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<b>DESCRIPTION</b>	<p>HARTOL Highway SAE 5W-30 is a high-quality energy-saving diesel engine oil that combines the latest additive technology with special synthetic base oils. This engine oil offers the following key properties:</p> <ul style="list-style-type: none"><li>• High detergency, which prevents the formation of deposits in the engine.</li><li>• High dispersion ability, which prevents the formation of deposits and sediment.</li><li>• Reliable protection against wear, corrosion, and foaming.</li><li>• High and stable viscosity index.</li><li>• Low sulfate ash content.</li><li>• Extended oil change intervals.</li><li>• Helps reduce fuel consumption.</li></ul>
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<b>APPLICATION</b>	<p>HARTOL Highway SAE 5W-30 multigrade engine oil, classified under the "Low SAPS" group of oils, is designed to deliver outstanding fuel economy. It was primarily developed for heavy-duty diesel engines that operate under the most demanding conditions. The oil is suitable for Euro 5 and Euro 6 engines that utilize low-sulfur diesel fuel, whether equipped with diesel particulate filters and exhaust gas catalysts or not. Additionally, it is compatible with Volvo 13L Euro 6 Step D engines, which require the VDS-5 specification.</p>
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<b>SPECIFICATIONS</b>	<ul style="list-style-type: none"><li>• ACEA E4, E6, E7, E8, E9, E11</li><li>• API CK-4</li><li>• Deutz DQC IV-18 LA</li><li>• DTFR 15C110 (228.51) / 15C120 (228.52)</li><li>• Mack EOS 4.5</li><li>• MAN M 3677/M 3777</li><li>• Renault VI RLD-3</li><li>• Scania LDF-4</li><li>• Volvo VDS-4.5</li><li>• Cat ECF-3</li><li>• Cummins CES 20086</li><li>• DAF Extended Drain</li><li>• Detroit Diesel 93K222</li><li>• DTFR 15C100</li><li>• MAN M 3691</li><li>• MB 228.31/228.51/228.52</li><li>• MTU Type 3.1</li></ul>
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<b>TYPICAL PROPERTIES</b>	<ul style="list-style-type: none"><li>• Density at 15 °C, kg/l</li><li>• Viscosity -20 °C, mPa.s</li><li>• Viscosity 40 °C, mm<sup>2</sup>/s</li><li>• Viscosity 100 °C, mm<sup>2</sup>/s</li><li>• Viscosity Index</li><li>• Flash Point COC, °C</li><li>• Pour Point, °C</li><li>• Total Base Number, mgKOH/g</li><li>• Sulphate Ash, %</li></ul>	<p>0,862 6300 72,00 12,10 167 212 -48 13,4 0,96</p>
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