



Shield X

Full Synthetic Heavy-Duty Engine Oils
SAE 5W-40 API CK-4/SN

Product Description

Shield X Elite Full Synthetic Heavy-Duty Motor Oil SAE 5W-40 is formulated with synthetic base oils and a premium additive package. This oil is designed for use in for use in high-speed four-stroke cycle diesel engines designed to meet 2017 model year on-highway and Tier 4 non-road exhaust emission standards as well as for previous model year diesel engines. This oil is especially effective at sustaining emission control system durability where particulate filters and other advanced aftertreatment systems are used. **Shield X Elite Full Synthetic Heavy-Duty Diesel Engine Oils API Service CK-4/SN** provide enhanced protection against oil oxidation, viscosity loss due to shear, and oil aeration as well as protection against catalyst poisoning, particulate filter blocking, engine wear, piston deposits, degradation of low- and high-temperature properties, and soot-related viscosity increase. In addition to API CK-4, this oils exceed the performance criteria of CJ-4, CI-4 with CI-4 PLUS, CI-4, and CH-4 and can effectively lubricate engines calling for those API Service Categories. When using this product in conjunction with fuel containing higher than 15 ppm of sulfur, consult the engine manufacturer for service interval recommendations.

Typical Properties*

SAE J300 Viscosity Grade	5W-40
<u>Appearance, Visual</u>	<u>Amber, Transparent, Liquid</u>
<u>Viscosity @ 40°C, cSt, ASTM D445</u>	<u>86.8</u>
<u>Viscosity @ 100°C, cSt, ASTM D445</u>	<u>14.5</u>
<u>Viscosity Index, ASTM D2270</u>	<u>175</u>
<u>CCS Apparent Viscosity, cP, ASTM D5293</u>	<u>5,600@-30°C</u>
<u>MRV Apparent Viscosity, cP, ASTM D4684</u>	<u>22,000@-35°C</u>
<u>Flash Point, °C, ASTM D92</u>	<u>218</u>
<u>Pour Point, °C, ASTM D97</u>	<u>-40</u>
<u>Total Base Number, mg KOH/g, ASTM D2896</u>	<u>9</u>

*The values shown are typical of current production. Some are controlled in the manufacturing process, while others are not. All of them may vary within tolerable ranges

Suitable for use

API CK-4, CJ-4, CI-4 Plus, CI-4, CH-4
API SN, SM, SJ, SF ACEA E9-12, Ford WSS-M2C171-F1
Cummins CES 20086
Mack EOS 4.5, DDC 93K222, Caterpillar ECF-3
Damiler MB 228.31
Volvo VDS-4.5, Renault Trucks, RLD-4 MTU Type 2.1
Deutz DQC III-10 LA