

Signature® Full Synthetic HD 5W40

Product Data Sheet



Product Description and Benefits:

SIGNATURE® FULL SYNTHETIC HD 5W40 uses premium synthetic base oil with innovative additive technology designed to perform in all manufacturers' engines including those with diesel aftertreatment emissions systems such as EGR and DPf.

Product Features:

- Excellent oxidation and thermal stability to reduce sludge and deposits
- Better low temperature pumpability
- Stay-in-grade shear stability to protect critical engine parts at high operating temperatures
- Specially formulated for 2017 greenhouse gas (GHG 17) compliant diesel engines designed to meet lower CO₂ emissions and improved fuel economy
- Backwards compatible with all previous API Oil Service Categories and engine models

Applications:

For use in all modern on-highway emission system designs as well as older on-highway diesel engines. Also in engines where an SAE 5W-40 viscosity grade is recommended including those adapted for the most stringent emissions standards. SIGNATURE® FULL SYNTHETIC HD 5W40 is designed for use in a mixed fleet: for on-highway applications operating in both high speed/heavy load and short haul delivery applications and for off-highway applications that operate at low-speed/heavy load conditions. SIGNATURE® FULL SYNTHETIC HD 5W40 is also suitable for use in refrigeration units.

Specifications:

SIGNATURE® FULL SYNTHETIC HD 5W40 engine oil meets or exceeds the requirements of:

ACEA E9, E7; API CK-4, CJ-4, CI-4 PLUS, CI-4, CH-4, SN, SM; Caterpillar ECF-3; Cummins CES 20086, 20081; JASO DH-2; Detroit Fluids Specification 93K222, 93K218; Daimler 228.31; Mack EOS-4.5; MAN M3575; MTU Oil Category 2.1; Renault Trucks RLD-4; Volvo VDS-4.5

Grade / Service Level	5W40
API Gravity, ASTM D1298	34.1
Specific Gravity, ASTM D1298	0.855
Viscosity, cSt@ 40°C, ASTM D445	88.8
Viscosity, cSt@100°C, ASTM D445	14.9
Viscosity Index	176
Flash Point, °C, ASTM D92	220
Pour Point, °C, ASTM D97	-40
Cold Crank Simulator, cP, ASTM D5293	<6600 @ -30°C

**Values are typical and may vary within normal production ranges*

Product (s) manufactured in the USA.

Always confirm that the product selected is consistent with the original equipment manufacturer's recommendation for the equipment operating conditions and customer's maintenance practices.