# **PURUS® SYNTHETIC BLEND** SAE 15W-40 CK-4/SN ENGINE





#### DESCRIPTION

PURUS SAE 15W-40 API CK-4/SN Synthetic Blend Heavy Duty Diesel Oil is formulated for use in highspeed turbocharged and fully aspirated four-stroke diesel engines. The heavy-duty engine oil meets Tier IV non-road emission standards and 2017 greenhouse compliance where a 15W-40 API CK-4 viscosity grade is recommended. The addition of full synthetic base stock provides outstanding low temperature flow, protects against wear, and extends drain intervals compared to conventional SAE 15W-40. PURUS is recommended for use in applications utilizing diesel fuels ranging in sulfur content up to 500 ppm.

## PURUS SAE 15W-40 API CK-4/SN Synthetic Blend Heavy Duty Diesel Oil is purpose built to meet these industry drivers and challenges:

- Sustained engine oil resilience and complete lubrication protection including soot related viscosity increase, engine deposit control, corrosive wear, and oil oxidation in today's higher operating temperature engines.
- Optimum engine durability and fuel economy in a wide range of applications including mixed fleets, agriculture, mining. construction, and fleets with long idle time and stop and go operations.
- •Low-Ash formulation for protection of exhaust aftertreatment, maintain fuel economy and extend DPF service intervals to reduce maintenance and downtime costs.

#### PERFORMANCE BENEFITS

INDUSTRY DRIVERS	PURUS 15W-40 SYN BLEND SUPPORTING TECHNOLOGY	PURUS BENEFITS PERFORMANCE ADVANTAGES		
Sustained Engine Oil Resilience and Complete Lubrication Protection.  • Engine oil service intervals have steadily increased while at the same time oil consumption has decreased requiring heavy duty engine oils to achieve increased life and durability demands.	PURUS Advanced Additive Technology  Formulated to meet extended interval challenges Controls soot related viscosity increase that can cause premature oil filter plugging, decreased fuel economy Stable viscosity under high loads and longer service intervals resulting in superior shear stability	Field Tested and Proven Million Mile Engine and Running Test  Oil Drain Interval extended to 50,000 mile Piston deposit control that ensures engine and component reliability Always refer to 0EM service interval recommendations  PURUS Benefits  Engine protection at low temperature and cold starts Field tested and proven million-mile engine and running test- Scan QR code for Million Mile Video Specifically designed to meet or exceed current severe operating conditions of both on and off road HD diesel engines		
Optimum Engine Durability and Engineered Oil Performance for Severe Duty  Optimum engine durability and engineered oil performance for severe duty service Cleans engine deposits and controls oil consumption	PURUS Advanced Additive Technology  Specific additive chemistry combined with premium base stocks to deliver durability and fuel economy in diverse fleet applications Performance enhanced with synthetic base stock			
Longer Diesel Aftertreatment Warranty and Useful Life Periods	PURUS Balanced Additive Anti Clogging DPF Technology	PURUS Synthetic Blend 15W-40 provides the following benefits		
Engine manufacturers are challenged with providing engine oils that promote longer engine aftertreatment useful life which are impacted by engine oil chemistry	Balanced additive package with higher Magnesium & Calcium additives vs. some competitive brands with lower Magnesium and higher Calcium additive systems     Industry leader in reducing oil consumption	Balanced additive technology improves Diesel Particulate Filter (DPF) porosity and flow, which reduces clogging & back pressure resulting in decreased fuel use     Longer DPF life results in extended DPF service intervals, reduction in fuel economy loss from regenerations, and costly unit downtime.		

## **APPLICATIONS**

PURUS SAE 15W-40 API CK-4/SN Synthetic Blend Heavy Duty Engine Oil

## **OEM Approvals**

- Cummins CES 20086
- Detroit Diesel DFS 93K222
- Ford Specification WSS-M2C171-F1
- Mack EOS-4.5
- Renault RLD-4
- Volvo VDS-4.5

- ACEA E9, E7
- Allison TES 439
- API CK-4, CJ-4, CI-4 PLUS, CI-4, CH-4, JASO DH-2, DH-1 SN, SM, SL, SJ
- Caterpillar ECF-3, ECF-2
- Cummins CES 20081
- Daimler MB 228.31
- Detroit Diesel DFS 93K218

- Deutz DQC III-10 LA
- Global DHD-1
- - Mack E0-0 Premium Plus, E0-N Volvo VDS-4, VDS-3
- MAN M3775
- Mil-PRF 2104 Rev. H
- MTU Category 2.1
- Navistar TSI-99-12

• PACCAR PX-7, PX-9, MX-11, MX-13

• Renault RLD-3



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#### TYPICAL PROPERTIES\*

Viscosity at 40° C, cST	D445	116		
Viscosity at 100° C, cST	D445	15.7		
Viscosity Index	D2270	143		
Pour Point °C (F)	D97	-33 (-27)		
Flash Point °C (F)	D92	238 (460)		
Sulfated Ash, wt.%	D874	1.0		
Cold Crank Simulator, cP	D5293	5250/-20°C		
Mini-Rotary Viscometer TPI, cP	D4684	19700/-25°C		
High Temperature High Shear at 150° C, cP	D4683	4.1		
TBN	D2896	10		

\*Due to continual product research and development, the information contained herein is based on products purchased in the U.S. and subject to change without notification. Typical properties may vary slightly.

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PRODUCT	6/1 QUART	3/1 GAL	2/2.5 GAL	5 GAL PAIL	6 GAL EPAK BOX	55 GAL DRUM	TOTE	BULK
Syn Blend 15W-40	PHD00469	PHD00369	PHD00461	PHD27164	PHD67164	PHD17164	PHD57164	17164