



# CK-4 - Full Synthetic HDMO 5W30 (API CK-4/SN, TBN 9)

Our CK-4 Full Synthetic HDMO SAE 5W30 Diesel Engine Oil is formulated with a premium 100% high-viscosity index synthetic base stock, plus a special additive package designed for superior protection against wear, corrosion, oxidation and varnish with superior antishear properties 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.

- It provides 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.
- Especially effective at sustaining emission control system durability where particulate filters and other advanced after treatment systems are used.
- In addition to API CK-4, these oils exceed the performance criteria of CJ-4, CI-4 with CI-4 Plus, CI-4, 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).
- Available in Bulk, 275Gall, 55Gall, 5Gall, 3/1Gall.



## Typical Inspections

Typical Inspections	Method	Typical Results
Color	Visual	Brilliant, Amber
Density Lbs/Gal	Gardner	10.2
API Gravity	ASTM D-1298	33.01
Specific Gravity @ 15.6°C	ASTM D-1298	0.885
Viscosity Index	ASTM D-2270	156
Pour Point °C (°F)	ASTM D-97	-45 (-49)
Flash Point C.O.C. °C (°F)	ASTM D-92	252 (485.6)
Fire Point C.O.C. °C (°F)	ASTM D-92	256 (492.8)
Viscosity @ 40°C, cSt	ASTM D-445	77.2
Viscosity @ 100°C, cSt	ASTM D-445	10.6
Sulfated Ash, wt%	ASTM D-874	0.95

## Meets/Exceeds Specifications

- SAE 5W30
- API CK-4/SN
- TBN 9
- ACEA E9-12

## Meets/Exceeds OEM Requirements

- Caterpillar ECF-3
- Cummins CES-20086
- Deutz DQC III-10 LA
- Mack EOS 4.5
- Mercedes Benz 228.31
- MTU Type 2.1
- Renault Truck RL-2
- Volvo VDS-45

Note: The general description, recommended uses, application data and statements in the product literature are guidelines. Because the product may be used for a variety of applications, over which **Carteroil USA Inc.** has no control. **Carteroil USA Inc.** assumes no liability for incidentals, consequential, or direct damage of any kind, regardless of causes, including negligence. For more information please visit us at [www.carteroilusa.com](http://www.carteroilusa.com)

