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WARCO Advanced CK-4 Heavy Duty Synthetic Blend SAE 15W-40 Diesel Engine Oil is a high-performance engine oil designed to meet 2021 and prior model year on-highway and Tier 4 exhaust emission standards. It provides enhanced protection against wear, oxidation, shear viscosity loss, low and high temperature degradation, soot related thickening as well as protection against particulate filter blocking and catalyst poisoning. It outperforms conventional motor oil and is recommended for naturally aspirated, turbocharged or supercharged diesel, gasoline, or propane truck, sport utility vehicle, and passenger car engines.

WARCO Advanced CK-4 Heavy Duty Synthetic Blend SAE 15W-40 Diesel Engine Oil meets or exceeds American Petroleum Institute (API) CK-4 / SN and all previous service classifications. It conforming to DFS 93K222 specifications and is FORD WSS-M2C171-F1, Volvo VDS-4.5, Mack EOS-4.5, and Renault VI RLD-3 approved. It has been field tested to be comparable to most American, Asian and European manufacturers' standards including ACEA E7-16, ACEA E9-16, MB 228.31, Renault VI RLD-4, CAT ECF-3, KOMATSU and many other OEM's specifications where a synthetic blend API CK-4 engine oil is recommended.

## **Benefits and Applications**

- For diesel and gasoline engines
- Comparable to MB 228.31, Renault VI RLD-4, CAT ECF-3, KOMATSU standards
- Demonstrated fuel economy improvement and retention
- Enhanced oxidative stability, emission system and wear protection
- Protection against soot-related viscosity increase
- Low- and high-temperature property control

## Typical Characteristic HD 15W-40 CK-4 Motor Oil

SAE GRADE	Heavy Duty	15W-40
API SERVICE		CK-4 / SN
API Gravity	ASTM D287	31.14
Flash Point, COC °C/°F	ASTM D92	229 / 444.2
Pour Point, °C/°F	ASTM D97	-34 / -29.2
Viscosity @ 40°C, cSt	ASTM D445	112.70
Viscosity @ 100°C, cSt	ASTM D445	15.4
Viscosity Index	ASTM D2270	139
CCS, mPa-sec °C max	ASTM D5293	5158 @ -20
Total Base No. TBN	ASTM D2896	10.2

Test Method ASTM - Typical test data are average values only. Minor variations, which do not affect performance, may occur.

## API CK-4 / SN

Conforms to DFS 93K222 and FORD WSS-M2C171-F1, ACEA E7-16, ACEA E9-16, Volvo VDS-4.5, Mack EOS-4.5, and Renault VI RLD-3 approved





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HANDLING AND SAFETY INFORMATION - Refer to WARCO (SDS) Safety Data Sheets for proper handling and safety information. Use the same care and handling as for any petroleum product. Nothing herein shall be deemed to constitute a warranty, express or implied, that said information or data are correct or that the products described are merchantable or fit for a particular purpose, or that said information, data or products can be used without infringing patents of third parties.