



Premium Plus Synthetic Blend HD CK-4 Engine Oils

STARFIRE Premium Plus Synthetic Blend HD CK-4 Engine Oils combine premium conventional and synthetic base stocks with next-generation additive technology. They are especially engineered for heavy duty diesel and gasoline engines operating under all service conditions, including today's emission controlled engines with EGR and diesel particulate filters using Ultra-Low Sulfur Diesel Fuel (ULSD) and Low Sulfur Diesel (LSD). They meet or exceed nearly all the next generation OEM specifications, including those from Ford, Cummins, Detroit Diesel, Mack, Volvo, Renault, Mercedes, MAN and Deutz. They can also be recommended for leading heavy equipment manufacturers such as John Deere, Kubota, Massey Ferguson, JJ Case, Allis Chalmers, and International Harvester.

This next-generation low-ash technology provides improved wear protection, deposit and soot control, and improves oil consumption by neutralizing combustion by-products that cause harmful deposits. STARFIRE Premium Plus Synthetic Blend HD CK-4 Engine Oils provide extended drain capabilities that prevents viscosity loss from shearing and reduces friction, leading to longer engine life and improved fuel economy. Their high film strength makes STARFIRE Premium Plus Synthetic Blend HD CK-4 Engine Oils suitable for both on and off-road driving conditions. They can be recommended for all new engines requiring CK-4 fluid and are backward compatible with API CJ-4, CI-4 PLUS, CI-4, and CH oils.

APPLICATION

- API CK-4, CJ-4, CI-4 Plus, CI-4, CH-4, CD, SN, SM, SL, SJ, SH, SG
- ACEA E7-12, E9-12
- Caterpillar ECF-3, ECF-2, ECF-1a
- Cummins CES 20081, 20086
- DAF
- Detroit Fluids Specification (DFS) 93K222, 93K218, 7SE-270, 2000/4000 Category 1
- Deutz DQC III-10-LA
- Ford WSS-M2C171-F1
- Global Specification DHD-1
- Inveco
- JASO DH-1 and DH-2
- Mack EOS 4.5, EO-O Premium Plus-07
- MAN 3575, 271, 3275
- Mercedes Benz MB 228.3, 228.31, 228.5, 229.1, 229.5
- MIL-PRF-2104H
- MTU Type II
- Navistar
- Renault RLD-4, RLD-3
- Scania LD-F, LDF-2
- Volvo VDS-4.5, VDS-4

TYPICAL PROPERTIES

SAE Grade	10W30	15W40
Pour Point, °C	-38	-33
Viscosity: cSt @ 40°C	75.8	119
cSt @ 100°C	11.1	15.1
Viscosity Index	136	132
Cold Crank Simulator, cP	6607 (-25°C)	6333 (-21°C)
Density (lb/gal)	7.25	7.31
Color	L4	L4