



PRODUCT BULLETIN

CAM2 Synthetic Blend Super HD CK-4

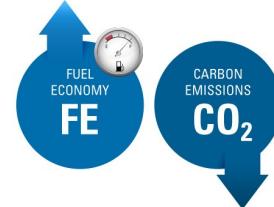
PRODUCT # 262, 320

CAM2 Synthetic Blend HD CK-4/SN combines premium base stocks with next-generation additive technology to produce our most fuel efficient cleanest burning, **low-ash** heavy duty engine oil to date¹. It meets or exceeds nearly all the next generation OEM specifications including those from Ford, Cummins, Detroit Diesel, Mack, Volvo, Renault, Mercedes, MAN and Deutz.

Super HD CK-4/SN Synthetic Blend motor oils protect engines with Emission Controls, EGR engines, as well as older engines. It is even recommended by leading heavy equipment manufacturers such as John Deere, Kubota, Massey Ferguson, JJ Case, Allis Chalmers, and International Harvester.

This ground breaking **low-ash technology** provides improved wear protection, deposit and soot control, and improves oil consumption by neutralizing combustion by-products that cause harmful deposits¹. Super HD CK-4/SN is an extended drain capable engine oil that prevents viscosity loss from shearing and reduces friction leading to longer engine life and improved fuel economy¹.

Its high film strength makes **Super HD CK-4** fluids suitable for both on and off-road driving conditions. It can be recommended for new engines requiring CK-4 fluid and is backward compatible with API CK-4, CJ-4, CI-4 PLUS, CI-4, and CH oils.



Features

- Low-ash formulation extends catalyst life
- 2x better corrosion control than the new API standards
- Protects cylinders up to 80x more than Daimler standards²
- Improved protection from thermal and oxidative breakdown
- Excellent anti-wear, anti-foam, and anti-rust properties
- Up to 63% better soot control than previous CJ-4 formulations
- Protects piston rings up to 2.5x better than its CJ-4 predecessor
- Extremely shear stable preventing viscosity loss
- Compatible with both diesel and gasoline engines
- Improved TBN retention over previous diesel engine oils

Applications

CAM2 Synthetic Blend Super HD CK-4/SN meets or exceeds the following OEM specifications:

API CK-4, CJ-4, CI-4+, CI-4, CH-4	VOLVO VDS-4.5
API SN(15W-40*)	ALLISON TES-439
ACEA E9-16	RENAULT RLD-4
CUMMINS CES20086 ³ , 81	MB 228.31
CAT ECF-3, ECF-2	MAN 3275 / 3575
DETROIT DIESEL DFS93K222 ³ , 218	MTU 2.1
FORD POWERSTROKE (WSS-M2C171-F1)	DEUTZ DQC III-10 LA
JOHN DEERE Tier IV Engines	GLOBAL DHD-1
MACK EOS-4.5	JASO DH-2

¹ Relative performance based on results from the Cummins ISM engine test run with SAE 10W-30, low HTHS.

² Relative performance based on results from the OM501LA engine test run with SAE 10W-30, low HTHS.

³ Approval obtained



TYPICAL CHARACTERISTICS

Product Code	262	320
SAE Grade	10W- 30	15W- 40
Viscosity @ 40°C, cSt	81.6	118
Viscosity @ 100°C, cSt	11.85	15.4
Viscosity Index	139	140
Sulfated Ash, m%	1.0	1.0
Pour Point, °C	-42	-38
HTHS @ 150°C	3.4	4.0
Flash Point, °C (COC)	220	229
Total Base Number, mg KOH/g	9.7	9.7
Phosphorous, m%	0.113	0.113

The above characteristics are typical of current production. While production will conform to CAM2's specification, slight variations may occur and do not affect performance.

For more information, contact your CAM2 Representative or visit our website @ www.CAM2.com

Special handling, notices or warnings

Avoid contact with eyes
Avoid prolonged or repeated contact with skin
DO NOT INDUCE VOMITING