PRINT

SAVE AS PDF

MAG 1® SYNTHETIC BLEND 15W-40 CK-4 HEAVY DUTY DIESEL ENGINE OIL

SYNTHETIC BLEND HEAVY DUTY DIESEL ENGINE OIL HEAVY DUTY ENGINE OIL

Featuring MAG 1® with FMX® Technology – Friction Management for Xtreme protection™. Delivers unsurpassed protection when thicker oil is preferred or recommended by the OEM. Our Synthetic Blend provides extra protection.

MAG 1 Synthetic Blend 15W-40 CK-4 is technologically advanced heavy duty diesel engine oil that provides extra protection and performance, compared to Conventional Engine Oil, including the following benefits:

- Excellent extended drain capability.
- Approved by or meets requirements of major OEMs such as Cummins, Detroit Diesel, Mack/Volvo, Paccar, Navistar, Caterpillar and others.

ENGINEERING AND INNOVATION FOR EXTRA PROTECTION

MAG 1® with FMX® Technology provides unsurpassed protection and performance. FMX Technology creates a strong, durable and high-performing level of protection that controls friction and reduces metal-to-metal contact in modern and older engine design.

Our advanced oil technology actually improves oil properties over time, retaining viscosity, friction and anti-wear benefits, even in today's hotter engines. This is exactly the kind of protection called for in engines that deliver greater horsepower and better fuel economy.

SYNTHETIC BLEND HEAVY DUTY DIESEL ENGINE OIL FEATURING FMX® TECHNOLOGY AND ***EVOLUTIONARY*** *PERFORMANCE*™

The latest MAG 1® Heavy Duty Diesel Engine Oils are specially engineered and formulated to provide:

PERFORMANCE

Extra protection for extended drain intervals.

- **Extended oil drain intervals**. Economies can be gained when following engine manufacturer recommendations and in conjunction with scheduled oil analysis.

STRENGTH

Up to 53% better wear protection.2

- **Enhanced friction reduction.** MAG 1® provides a very strong oil film to prevent metal-to-metal contact between rotating parts, delivering up to 53% better wear protection.[3]
- **Unsurpassed wear protection**. The latest generation API CK-4 MAG 1 engine oils provide increased protection against harmful engine and bearing wear due to cavitation, because they improve oil aeration.

DURABILITY

Up to 83% better oxidation control.2

Up to 63% better deposit control.2

- **Better oxidation and deposit control.** FMX Technology stands up to high heat and stress to protect as well on the last day as it does on the first day. Up to 83% better oxidation control and 63% better deposit control.[4]
- **Formulated with higher starting TBN (10)**. Provides added oxidation control and protection against acid buildup that can cause rust and corrosion.

1 Using HD 10W-30 CK-4, compared to Conventional HD 15W-40 CK-4 during on-highway long-haul service. Savings will vary on idle time and other driving conditions of your fleet or vehicle.
2 Compared to new limits of API CK-4 requirements.
[3] To measure friction reduction benefits, engineers used the ball-on-disk traction test.
[4] Compared to new limits of API CK-4 requirements.

APPLICATIONS

- This product and grade is diesel engine oil recommended for naturally aspirated and turbocharged four-stroke diesel engines in which the API CK-4 service categories are recommended. It is formulated for engines operating under severe service and a wide range of cold and hot temperatures.
- It is backward compatible for CJ-4 and older API service categories.
- Approved by or meets requirements of major OEMs such as Cummins, Detroit Diesel, Mack/Volvo, Paccar, Navistar, Caterpillar, and others.

INDUSTRY/OEM SPECIFICATIONS

API CK-4	Approved
API SN	Approved
Ford WSS-M2C171-F1	Approved
ACEA E9, E7, E4, E2	Meets Requirements
API CI-4 Plus, CI-4, CH-4, CG-4, CF-2, CF	Meets Requirements
API CJ-4	Meets Requirements
API SJ, SH, SG, SF	Meets Requirements
API SL	Meets Requirements
API SM	Meets Requirements
CAT ECF-3, ECF-2, ECF-1-a	Meets Requirements
Chrysler/Fiat MS-10902	Meets Requirements
CID A-A-52306, MIL-PRF-2104G	Meets Requirements
Cummins 20086	Meets Requirements
Cummins CES 20081, 20077, 20076	Meets Requirements
Detroit Diesel 93K218, 93K215, 93K214	Meets Requirements
Detroit Diesel 93K222	Meets Requirements
Ford WSS-M2C171-E	Meets Requirements
Global DHD-1	Meets Requirements
JASO DH-2	Meets Requirements
Mack EO-O Premium Plus, EO-N Premium Plus 03, EO-M Plus, and prior	Meets Requirements
Mack EOS-4.5	Meets Requirements
MAN 3275, 270	Meets Requirements
MAN 3575	Meets Requirements
MB 228.3, 228.31	Meets Requirements
MTU 2.1	Meets Requirements
MTU Type I, Type II	Meets Requirements
Renault RLD-4	Meets Requirements
Volvo VDS-4, 3, 2	Meets Requirements
Volvo VDS-4.5	Meets Requirements
Allison C-4	Suitable for Use

TYPICAL PROPERTIES

Calcium, wt. %	ASTM D5185	0.105
Cold Cranking Simulator at (°C), cP	ASTM D5293	5398 (-20)
Color	ASTM D1500	3
Flash Point °C	ASTM D92	224
Flash Point °F	ASTM D92	435
Gravity, °API	ASTM D287	30.55
High Temperature / High Shear Vis at 150°C, cP	ASTM D5481	4.3
Magnesium, wt. %	ASTM D5185	0.1
Molybdenum, wt. %	ASTM D5185	0.0066
Nitrogen, wt. %	ASTM D4629	0.105
Noack Volatility, % loss	ASTM D6375	10
Phosphorus, wt. %	ASTM D5185	0.115
Pour Point °C (°F)	ASTM D5950	-36°C (-33°F)
Pumping Viscosity at (°C), cP	ASTM D4684	21,600 (-25)
Specific Gravity @ 60°F (15.6°C)	ASTM D4052	0.8732
Sulfated Ash, wt. %	ASTM D874	0.99
Sulfur, wt. %	ASTM D4951	0.32
TBN, mgKOH/g	ASTM D2896	10.0
Viscosity @ 100°C cSt	ASTM D445	15.66
Viscosity @ 40°C cSt	ASTM D445	116.1
Viscosity Index	ASTM D2270	143
Zinc, wt. %	ASTM D5185	0.127

CONTAINER/BULK AVAILABILITY

6/1 Quart	Product Number - 65033
3/1 Gallon	Product Number - 64845
5 Gallon Pail	Product Number - 70015
55 Gallon Drum	Product Number - 69935
330 Gallon Tote	Product Number - 69205
6/1 Quart - Not for Sale in US	Product Number - 69042
3/1 Gallon - Not for Sale in US	Product Number - 69044
5 Gallon Pail - Not for Sale in US	Product Number - 69058
55 Gallon Drum - Not for Sale in US	Product Number - 69046

Available in Bulk

Information accurate as of June 6, 2025