



Diesel Engine Oil



Mighty Engine Guard Diesel Motor Oils are formulated with special components not available in gasoline motor oils, such as more robust detergency additives to handle the soot inherent to diesel engines. Diesel fueled engine byproducts are different than those in gasoline fueled motors. Engine Guard diesel motor oils combine the highest quality base stocks and additives to provide the best balance for dealing with the increased contaminants in diesel motors.

Features and Benefits



- ✓ *Enhanced friction reduction. Engine Guard Diesel Motor Oil provides a very strong oil film to prevent metal-to-metal contact between rotating parts, delivering up to 53% better wear protection.*
- ✓ *Unsurpassed wear protection. The latest generation API CK-4 Engine Guard engine oils provide increased protection against harmful engine and bearing wear due to cavitation, because they improve oil aeration.*
- ✓ *Better oxidation and deposit control. Engine Guard Diesel Motor Oil 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.*
- ✓ *Formulated with higher starting TBN (10). Provides added oxidation control and protection against acid buildup that can cause rust and corrosion.*



Industry/OEM Specifications and Licenses

Available Package Sizes

Viscosity	Gallons	Bag N' Box	Drums	Totes	Bulk
10W/30 CK-4 Syn Blend		✓	✓	✓	*
15W/40 CK-4 Syn Blend	✓	✓	✓	✓	*

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Typical Properties

Viscosity Grade		Syn Blend 15W/40 CK-4	Syn Blend 10W/30 CK-4
Calcium, wt. %	ASTM D5185	0.105	.105
Cold Cranking Simulator at (°C), cP	ASTM D5293	5398 (-20)	6270 (-25)
Color	ASTM D1500	3	2.5
Flash Point °C	ASTM D92	224	-
Flash Point °F	ASTM D92	435	-
Gravity, °API	ASTM D287	30.55	31.39
High Temperature / High Shear Vis at 150°, cP	ASTM D5481	4.3	3.5
Magnesium, wt. %	ASTM D5185	0.1	0.1
Molybdenum, wt. %	ASTM D5185	0.0066	0.0066
Nitrogen, wt. %	ASTM D4629	0.105	0.105
Noack Volatility, % loss	ASTM D6375	10	13
Phosphorus, wt. %	ASTM D5185	0.115	0.115
Pour Point °C (°F)	ASTM D5950	-36°C (-33°F)	-39°C (-38°F)
Pumping Viscosity at (°C), cP	ASTM D4684	21,600 (-25)	23,000 (-30)
Specific Gravity @ 60°F (15.6°C)	ASTM D4052	0.8732	0.8637
Sulfated Ash, wt. %	ASTM D874	0.99	0.99
Sulfur, wt. %	ASTM D4951	0.32	0.32
TBN, mgKOH/g	ASTM D2896	10.0	10
Viscosity @ 100°C cSt	ASTM D445	15.66	12.21
Viscosity @ 40°C cSt	ASTM D445	116.1	82.06
Viscosity Index	ASTM D2270	143	149
Zinc, wt. %	ASTM D5185	0.127	0.127

Industry/OEM Approvals

Title	Syn Blend 15W/40 CK-4	Syn Blend 10W/30 CK-4
ACEA E9, E7, E4, E2	Meets Requirements	Meets Requirements
Allison C-4	Suitable for Use	Suitable for Use
API CI-4 Plus, CI-4, CH-4, CG-4, CF-2, CF	Meets Requirements	Meets Requirements
API CJ-4	Approved	Approved
API CK-4	Approved	Approved
API SH, SG, SF, SE, SD, SC	Meets Requirements	-
API SL	Meets Requirements	-
API SM	Meets Requirements	-
API SN	Approved	-
CAT ECF-3, ECF-2, ECF-1-a	Meets Requirements	Meets Requirements
Chrysler/Fiat MS-10902	Meets Requirements	-
CID A-A-52306, MIL-PRF-2104G	Meets Requirements	Meets Requirements
Cummins 20086	Meets Requirements	Meets Requirements
Cummins CES 20081, 20077, 20076	Meets Requirements	Meets Requirements
Detroit Diesel 93K218, 93K215, 93K214	Meets Requirements	Meets Requirements
Detroit Diesel 93K222	Meets Requirements	Meets Requirements
Ford WSS-M2C171-E	Meets Requirements	Meets Requirements
Ford WSS-M2C171-F1	Meets Requirements	Meets Requirements
Global DHD-1	Meets Requirements	Meets Requirements
JASO DH-2	Meets Requirements	Meets Requirements
Mack E0-0 Premium Plus, E0-N Premium Plus 03, E0-M Plus, and prior	Meets Requirements	Meets Requirements
Mack E0S-4.5	Meets Requirements	Meets Requirements
MAN 3275, 270	Meets Requirements	Meets Requirements
MAN 3575	Meets Requirements	Meets Requirements
MB 228.3, 228.31	Meets Requirements	Meets Requirements
MTU 2.1	Meets Requirements	Meets Requirements
MTU Type I, Type II	Meets Requirements	Meets Requirements
Renault RLD-4	Meets Requirements	Meets Requirements
Volvo VDS-4, 3, 2	Meets Requirements	Meets Requirements
Volvo VDS-4.5	Meets Requirements	Meets Requirements
CAT T0-2	-	Suitable for use

*Check for availability.

MLP107