

Lubriguard[™] 15W-40 CJ-4/SM Heavy Duty Diesel Engine Oil

Lubriguard 15W-40 CJ-4/SM Heavy Duty Diesel Engine Oil – CJ-4 represents the highest level of engine protection and performance ever built into a new lubricant specification. It was designed for all diesel engine applications, including today's emission controlled engines with EGR and diesel particulate filters using Ultra-Low Sulfur Diesel fuel (<15 PPM Sulfur) (ULSD) and Low Sulfur Diesel (LSD). It is formulated to provide improved wear protection, deposit and oil consumption control, soot-related viscosity control, prevention of viscosity loss from shearing, used oil low-temperature pumpability and protection from thermal and oxidative breakdown. It also contains a sophisticated additive system that is specifically designed to improve the protection of advanced emission control systems such as diesel particulate filters.

It is suitable for use in almost all foreign and domestic diesel engines for both the latest 2007 emission compliant and older engines. Always consult your owner's manual for proper application.

Lubriguard 15W-40 CJ-4/SM Heavy Duty Diesel Engine Oil meets API Service Classification CJ-4, CI-4 PLUS, CI-4, CH-4, CG-4, CF-4, CF/SM, SL, SJ, SH. It has received OEM Approvals for Mack EO-O Premium Plus, Volvo VDS-4, DDC 93K218, Cummins CES 20081, Renault RLD-3. It is recommended for engines specifying Caterpillar ECF-3, ECF-2, ECF-1a, Mack EO-N Premium Plus 03, Mack EO-N Premium Plus, Mack EO-M PLUS, Mack EO-M, Mercedes Benz p228.31, MAN 3575, MTU Type I and II, Cummins CES 20077 and 20076, Volvo VDS-3, DHD-1, ACEA E9, ACEA E7, JASO DH-2, and Allison C-4.

Benefits

- Handles double the soot of API CI-4 oils
- Protects emission control systems
- Outstanding oxidation stability
- Excellent low temperature properties helps speed cold starts
- Universal product for mixed fleet operations
- High 10 TBN



Warren Oil Company, Inc



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Typical Characteristics

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|---|--------|-------------|
| API CJ-4, CI-4 PLUS, CI-4, CH-4, CG-4, CF-4, | | X |
| CF/SM, SL, SJ, SH | | 37 |
| Caterpillar ECF-1a, ECF-2, ECF-3 | | X |
| Cummins CES 20081, 20077, 20076 | | X |
| Mack EO-O Premium Plus, EO-N Premium Plus 03, | | |
| EO-N Premium Plus, EO-M PLUS, EO-M | | X |
| Mercedes Benz p228.31 | | X |
| MAN 3575 | | X |
| ACEA E9 and E7 | | X |
| Volvo VDS-4, VDS-3 | | X |
| DDC 93K218 | | X |
| MTU Type I and II | | X |
| Allison C-4 | | X |
| Global DHD-1 | | X |
| JASO DH-2 | | X |
| Renault RLD-3 | | X |
| Product Data | Test | Typical |
| | Method | |
| @ 40° C, cST | D445 | 120.0 |
| @ 100°C, cST | D445 | 15.7 |
| Viscosity Index | D2270 | 138 |
| Pour Point °C (°F) | D97 | -33 (-27) |
| Flash Point °C (°F) | D92 | 238 (460) |
| Neutralization No., TBN-E | D2896 | 10 |
| Sulfated Ash, wt.% | D874 | 1.0 |
| Cold Crank Simulator, cP | D5293 | 6620/-20°C |
| Mini-Rotary Viscometer TP1, cP | D4684 | 23700/-25°C |
| High Temperature High Shear, HTHS @150°C, cP | D4683 | 4.3 |



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