

Heavy Duty Engine Oil API CJ-4/SM



Description/Benefits

- Driven by the EPA's On-highway 2007 Exhaust Emission Standards that require major reductions in nitrogen oxide (NOx) and particulate matter (PM) for 2007 model year trucks
- Improves oil consumption characteristics and protection against bearing corrosion
- Represents a major performance upgrade over CI-4 Plus in terms of emissions control system durability as well as additional protection in terms of valve train wear, piston deposit control and soot handling capabilities.
- Performance Tests are a combination of existing CI-4 Plus, CI-4 and CH-4 engine tests using today's diesel fuel (500 PPMs) as well as new engine tests using ultra low sulfur diesel fuel (ULSD=15PPM) that is mandated for on road use.
- Maximum chemical limits on sulfated ash (SA), Phosphorus (P) and Sulphur (S) have been set to address the emissions system compatibility and durability standards

Applications

- API CJ-4, CI-4 Plus, CI-4, CH-4, CG-4, CF-4, SM, SL, SJ, SH
- Acea E7
- CAT ECF-1a, ECF-2, ECF-3
- Cummins CES 20081
- Detroit Diesel 93K218
- Mack EO-O Premium Plus 07
- MAN M3275
- MB p228.3, p228.31
- MTU Type 2
- Volvo VDS 4T



Premium Performance. Heavy Duty Value.

Performance Specification

Specification	10W-30	15W-40
Viscosity, cSt @ 40°C	79.3	119.7
Viscosity, cSt @ 100°C	11.8	14.5
Viscosity Index	142	136
Viscosity Cp MRV TP1	17,000 (-30°C)	19,000 (-25°C)
Viscosity Cp CCS	6,200 (-25°C)	5,800 (-20°C)
Flash Point, °C	223	226
Pour Point, °C	-42	-39
Sulphated Ash, WT%	0.99	0.972
TBN (D-2896)	10	10