



PRODUCT SPECIFICATION DATA SHEET



BOSS EXTREME DIESEL ENGINE OIL API CJ-4

Customer Benefits:

This diesel engine oil specification is 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.

Performance Tests for the API CJ-4 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.

API CJ-4 represents a major performance upgrade over CI-4Plus 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. This product also improves oil consumption characteristics and protection against bearing corrosion.

Maximum chemical limits on sulfated ash (SA), Phosphorus (P) and Sulphur (S) for the API CJ-4 lubricants have been set to address the emissions system compatibility and durability standards.

PERFORMANCE SPECIFICATIONS:

	10W30	15W40
VISCOSITY @ 40C, m m ² /S	79.3	119.7
VISCOSITY @ 100C, m m ² /S	11.8	14.5
VISCOSITY INDEX	142	136
VISCOSITY Cp MRV TP1	17000 @ -30C	19000 @ -25C
VISCOSITY Cp CCS	6200 @ -25C	5800 @ -20C
FLASH POINT, COC, C	223	226
POUR POINT, C	-42C	-39
ASH, SULFATED (wt%)	0.99	0.972
TOTAL BASE NUMBER	10	10

Applications:

•API	CJ-4, CI-4 PLUS, CI-4, CH-4, CG-4, CF-4
•API	SM, SL, SJ, SH
•ACEA	E7
•CATERPILLAR	ECF-1a, ECF-2, ECF-3
•CUMMINS	CES 20081
•DETROIT DIESEL	93K218
•MACK	EO-O PREMIUM PLUS '07
•MAN	M3275
•MB APPROVAL	228.3 and 228.31
•MTU	TYPE 2
•VOLVO	VDS 4