



PRODUCT SPECIFICATION DATA SHEET



SYNTHETIC BLEND DIESEL ENGINE OILS

GENERAL DESCRIPTION

CJ-4 DEO is our most advanced synthetic blend diesel engine oil engineered to protect all 2007 model year low emission engines and their exhaust after treatment systems. This unique formulation was also designed to provide additional protection for older engines. The high TBN, outstanding TBN retention, and additional anti-oxidant, gives CJ-4 DEO the highest level of "Reserve Quality" to provide excellent engine protection in the most severe service.

CJ-4 DEO is designed for longer engine life in fleet, construction, small natural gas and agriculture equipment under the most extreme conditions. It has undergone thousands of hours of engine testing and millions of miles of field testing to give unsurpassed engine protection.

CJ-4 DEO has been proven to protect diesel particle filter (DPF) against ash buildup. In addition, improved engine protection from soot, deposits, varnish, wear, acid accumulation, TBN retention, viscosity shear loss, and oil consumption.

EXPECT SUPERIOR PERFORMANCE IN:

- Four-stroke naturally aspirated and turbocharged diesel and natural gas engines.
- All new 07' low emission engines with exhaust after treatments devices.
- Pre-2007 engines specifying older API or OEM oil performance categories.
- Using ultra low or sulfur diesel fuel.

FEATURES AND BENEFITS

Emission and Catalyst Protection:

Specifically designed to protect catalyst, particulate filters, and other emission components providing less engine down time.

Oil Durability: A special synthetic blend and enhanced oxidation system provides longer oil and engine life.

Oil Pumpability: CJ-4 DEO synthetic blends exceed the pumpability requirements of multi-grade oils, providing improved lubrication to critical engine parts to reduce wear during cold start-ups.

Exceptional Soot Control: CJ-4 DEO has demonstrated exceptional soot control that exceeds the requirements of all new and older engines. This additional control reduces engine wear and extends engine life.

TBN Retention: a high Total Base Number (TBN) and excellent TBN retention means that more combustion contaminants (deposits, soot, acids) can be held in suspension and neutralized during the course of a drain interval.

Deposit and Oil Consumption Control: Provides a reduction of deposits and oil consumption leading to longer engine, emission, and (DPF) system life.

Reserve Protection: CJ-4 DEO features the added security of extra reserve built into the oil. This reserve capacity suspends additional soot, neutralizes additional acids, reduces oxidation, and reduces wear for longer engine life.

Volatility Control: Less oil volatility provides reduced consumption, lower deposits, and reduced oil into the emission system.

Extended Drain: CJ-4 DEO is capable of extended drain service in 07' and older engine using low sulfur and ultra low sulfur diesel fuels.

PERFORMANCE SPECIFICATIONS:

TYPICAL PHYSICAL PROPERTIES

<u>SAE GRADE</u>	<u>0W30</u>	<u>0W40</u>	<u>5W40</u>	<u>15W40</u>
API SERVICE	CJ-4	CJ-4	CJ-4	CJ-4
API GRAVITY/DENSITY @ 15.5°C, kg/l	0.832	0.848	0.877	0.872
VISCOSITY, cST @ 40°C	56.5	74.0	94.8	118.3
VISCOSITY, cST @ 100°C	10.2	12.9	15.8	15.7
VISCOSITY INDEX	170	177	179	141
FLASH POINT, °C		168	208	226
POUR POINT, °C	-54	-45 (-43)	-43 (-42)	-43 (-42)
VISCOSITY, HIGH SHEAR (HTHS), P @ 150°C	3.097mPa*s Min 2.9	3.550mPa*s Min 3.5	3.891mPa*s Min 3.5	4.402mPa*s Min 3.7
SULPHATED ASH, WT.% (D874)	0.99	0.99	0.99	1.00
TBN (D-2896)	10	10	10	10

APPLICATIONS:

CJ-4 DEO is designed to exceed the newest API and OEM service categories:
Mack EO-O PP 07', EO-N PP 03', EO-N Plus, EO-M*, Volvo VDS-4/3/2, Cummins 20081, 20071, 20072*, 20076*, 20077*, 20078, Caterpillar ECF-3/1, Detroit Diesel 93K218/15/14, 7SE270, Mercedes Benz 228.3*, Renault RLD-3*, MAN M-3275*, Global DHD-1*, ACE E7-04*, JASO DH-2, MIL-L-2104 E/F, ALLISON C-4/3.

*SAE 15W-40 Viscosity Grade

Typical Customer

Operators of heavy-duty diesel engines:

- Truck fleets with new low emission compliant engines or older engines.
- Construction diesel engines operating under heavily loaded conditions.
- Agricultural diesel engines operating in severe conditions.
- Diesel passenger cars and light trucks.
- Stationary engines, irrigation, and standby generators.

PROPERTIES:

Exceptional pump ability at low temperatures
Outstanding TBN retention
Excellent control of fuel soot loading
Low oil consumption
Excellent high dispersancy-detergency additive package
Engineered for maximum engine protection
Can be utilized in gasoline automobiles and light duty panel trucks where heavy duty engine operations are encountered.

Health and Safety

A complete material safety data sheet is available upon request. Used motor oil contains combustion by-products which may be harmful. Avoid prolonged or repeated skin contact. Wash clothing and exposed areas with soap and water. Don't pollute – return used oil to a collection center.

In order to continue to provide superior quality, BOSS LUBRICANTS reserves the right to change composition of its products without notice. For the location of the Distributor nearest you, please call 1-800-844-9457 or fax (403) 279-2272 #112, 6303 30th Street S.E. Calgary, AB T2C 1R4
Website: www.bosslubricants.com