NEMCO LUBRICANTS & CHEMICALS

Product Data Sheet

Synthetic Super DEO 5W-40 & 0W-40

Full Synthetic Heavy Duty Diesel Engine Oil

Description

Nemco Synthetic Super DEO oils are advanced full synthetic diesel engine oils. Engineered for fuel economy, wide temperature range performance and to protect all 2007 and newer 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 Total Base Number (TBN), outstanding TBN retention, additional antioxidant, and Wear Saver Technology™ give Synthetic Super DEO the highest level of reserve quality. Synthetic Super DEO oils are designed for longer engine life in fleet, construction, and agriculture equipment under severe service and extreme temperature conditions. This has been supported by extensive engine and field testing.

Synthetic Super DEO oils' technology has been proven to protect diesel particle filter (DPF) against ash buildup, and provide improved engine protection from soot, deposits, varnish, wear, acid accumulation, TBN loss, oil viscosity shear, and oil consumption.

Features & Benefits

- Fuel Economy: Demonstrated in engine and road test to provide up to 1.2% improved fuel economy
- Emission and Catalyst Protection: Specifically designed to protect catalyst, particulate filters, and other emission components providing less engine down time
- Oil Durability: This full synthetic oil includes Wear Saver Technology™ and a special oxidation system provides longer oil and engine life at high temperatures
- Oil Pumpability: Exceeds the pumpability requirements of 5W-40 and 0W-40 oils, providing improved lubrication to critical engine parts which reduces wear during cold temperature start-ups
- Wear Control: Provides improved wear control over previous performance classifications and exceeds the requirements of today's tests
- Exceptional Soot and Deposit Control: Demonstrated exceptional soot and deposit control that exceeds the requirements of 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 more combustion contaminants (deposits, soot, acids) can be neutralized during the course of a drain interval
- Volatility Control: Less oil volatility provides reduced consumption, lower deposits, and a reduced amount of oil in the emission system
- Extended Drain: Capable of extended drain service in new and older engines

Applications

- Four-stroke naturally aspirated and turbocharged diesel engines
- All 2007 and newer low-emission engines with exhaust after treatments devices
- Pre-2007 engines specifying older API or OEM oil performance categories
- Using ultra low or low sulphur diesel fuel
- When the manufacturer recommends the use of 5W-40 or 0W-40 diesel engine oils

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Meets and/or exceeds

- Meets API CJ-4 and SM
- Mack EO-O PP 07', EO-N PP 03, EO-M Plus, EO-M,
- Volvo VDS-4, VDS-3
- Cummins 20081
- Caterpillar ECF-3, ECF-2
- Detroit Diesel 93K218/15/14
- Mercedes Benz 228.31
- Global DHD-1
- ACEA E9/E7
- JASO DH-2

Typical physical characteristics

Properties	Method	Super DEO 5W-40	DEO 0W-40
SAE Viscosity Grade		5W-40	0W-40
Kinematic Viscosity @40°C mm²/s	ASTM D445	97	87
Kinematic Viscosity @100°C mm²/s	ASTM D445	15.5	15.1
Viscosity Index	ASTM D2270	169	184
CCS Viscosity °C	ASTM D5293	5,664@-30	5,360@-35
Density @20°C kg/l		.8543	.8506
Sulphated Ash %	ASTM D874	1.0	1.0
Total Base Number mg KOH/g	ASTM D2896	10	10
Flash Point (CC) °C	ASTM D92	n/a	n/a
Pour Point °C	ASTM D97	-45	-54
MRV-TP1, Viscosity, cP °C	ASTM D4684	25,800@-35	20,000@-40

These characteristics are typical of current production, variations in these characteristics may occur.

Health, Safety, & Environment

GHS compliant Safety Data Sheets are available at nemco.ca under the MSDS Library. For SDS in French, please contact info@nemco.ca. These products are considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200); the SDS contains valuable information critical to the safe handling and proper use of the product.

Always take used oil to an authorized collection point. Do not discharge into drains, soil, or water.

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