



## Product Data Sheet

# Synthetic Super DEO 5W-40 CK-4

## Full Synthetic Heavy Duty Diesel Engine Oil

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### Description

Nemco's Synthetic Super DEO 5W-40 Full Synthetic Heavy Duty Diesel Engine Oil is API CK-4 approved engine oil. This premium heavy duty diesel engine oil is engineered for optimal fuel economy, wide temperature range performance, and superior protection of all Tier IV and newer model year low-emission engines and exhaust after treatment systems. This engine oil is backwards compatible and may be used in equipment that called for earlier API oil categories CJ-4, CI-4 with CI-4 Plus, and CH-4.

Nemco's Heavy Duty Full Synthetic SAE 5W-40 Diesel Engine Oil provides industry-leading anti-oxidant performance and aeration protection, and gives this synthetic 5W-40 engine oil the highest level of field tested durability for longer engine life in fleet, construction, and agriculture equipment under severe service and extreme temperature conditions.

### Features & Benefits

- 🔥 Proven improved fuel economy (up to 1.2%) compared to 15W-40 engine oil
- 🔥 Excellent TBN retention to neutralize deposits, soot, and acids during the course of a drain interval
- 🔥 Advanced oxidation protection and enhanced shear stability
- 🔥 Protects DPF (diesel particle filter) against ash build up
- 🔥 Reduces wear during cold temperature start up; exceeds 5W-40 pumpability requirements
- 🔥 Exceptional soot and deposit control reducing engine wear and extending engine life

### Applications

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

### Meets and/or Exceeds:

- Approved and licensed for API Service CK-4, CJ-4, CI-4 Plus, CI-4, CH-4
- ACEA E-92012, E7
- Caterpillar ECF-3, ECF-2
- Chrysler (FAC) MS-10902, (EcoDiesel engines)
- Cummins CES 20086, 20081
- Daimler Mercedes Benz 228.31
- Detroit Diesel DFS 93K222, 93K218
- Mack EOS-4.5, EO-O Premium Plus, EO-N
- MAN M-3575
- MTU Category 2.1
- Renault RLD-4, RLD-3
- Volvo VDS-4.5, VDS-4, VDS-3

## Typical physical characteristics – Full Synthetic Heavy Duty Diesel Engine Oils

Properties	Method	5W-40	0W-40
API Service Category	-	CK-4, CJ-4, CI-4 Plus, CI-4, CH-4/SN	Suitable for use CJ-4, CI-4 Plus, CI-4, CH-4/SM
Oil Type	-	Full Synthetic	
Kinematic Viscosity @40°C mm <sup>2</sup> /s	ASTM D445	94.3	87.3
Kinematic Viscosity @100°C mm <sup>2</sup> /s	ASTM D445	15.2	15.1
Viscosity Index	ASTM D2270	170	184
CCS Viscosity @°C	ASTM D5293	5,930@ -30	5,400@ -35
Sulphated Ash, % wt.	ASTM D874	1.1	<1.0
Total Base Number mg KOH/g	ASTM D2896	11	10
Flash Point (CC), °C (°F)	ASTM D92	n/a	n/a
Pour Point, °C (°F)	ASTM D97	-45 (-49)	-54 (-65)
MRV-TP1, Viscosity, cP@°C	ASTM D4684	32,800@ -35	20,000@ -40

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

## Availability and product codes

Pack size	4x4L case	20L pail	205L drum	1,000L tote/Bulk
Synthetic DEO 5W-40	DMOSZ0008	DMOSZ0018	DMOSZ0033	DMOSZ0049
Synthetic DEO 0W-40*	DMOSZ0005	DMOSZ0016	DMOSZ0030	DMOSZ0042
Availability	Year round			

*This product \*\*is not suitable for use where API Service CK-4 is required.*

## Use and Storage

To get the best performance from your equipment ensure products meet or exceed manufacturing requirements. Lubricants typically have a shelf life of 5 years under ideal storage conditions. Keep drums and totes in good condition and away from moisture. Keep bungs securely in place; as bungs breath, moisture can seep in over time. Where possible, avoid storage in areas where the temperature fluctuates between extreme highs and lows.

## Health, Safety, &amp; Environment

GHS compliant Safety Data Sheets are available at [nemco.ca](http://nemco.ca) under 'Safety Data Sheets'. For SDS in French, please contact [info@nemco.ca](mailto:info@nemco.ca). This material is WHMIS 2015 Classified. 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. Avoid discharge into drains, soil, or water. As with any lubricant, keep out of reach of children and animals.

## Quality

Nemco works with respected industry suppliers and is an active member of ILMA. Nemco Resources Limited manufacturing facility in Winnipeg, Manitoba is proud to be certified to ISO 9001. For questions regarding quality, please contact our Technical Sales representatives.