



DURAGARD® IS A REGISTERED TM OF ADVANTAGE DIST. LLC, ROCH., MN 55904 Product Code: DURCK45/40SYNXX

DURAGARD®

DIAMOND SYNTHETIC® SAE 5W-40 API CK-4 ENGINE OIL

ADVANCED TECHNOLOGY, PREMIUM SYNTHETIC LUBRICANTS

DURAGARD® DIAMOND SYNTHETIC® SAE 5W-40 API CK-4 ENGINE OIL is an extreme performance (HTHS) high-temperature, high-shear viscosity fully synthetic oil formulated to meet high-performance demands with long drain capabilities, possible increase in fuel efficiency and reduced over all costs. CK-4 will deliver more oxidization protection for hotter, heavy-duty engines, minimizing acid formation, deposits and viscosity increase, promoting reduced wear, improved shear stability, greater oxidation stability, and foam prevention. Suitable for mixed fleets.

DURAGARD® DIAMOND SYNTHETIC® SAE 5W-40 API CK-4 ENGINE OIL is a new formula that is specifically engineered for use in mixed fleets, gasoline and diesel. CK-4 has a select additive package for exceptional performance at high temperatures and heavy loads with improved engine protection over previous CJ-4 formulas. The advance in oil technology standards establishes an oil quality specification that helps protect today and tomorrow diesel engines.

DURAGARD® DIAMOND SYNTHETIC® SAE 5W-40 API CK-4 ENGINE OIL is a direct replacement for CJ-4 using the same viscosity grades in Synthetic oil types providing protection for all future engine designs, while improving protection of current and previous engines. CK-4 and CJ-4 can be mixed and should have no detrimental impact to engines. However, it is recommended to completely change over to CK-4 oil by using a hot drain of the CJ-4 oil to help minimize residual oil and achieve full benefits of the new oil. Fleets using CJ-4 should implement a secondary storage for CK-4 or completely empty a CJ-4 tank before filling with Duragard® Diamond Synthetic® SAE 5W-40 API CK-4 Engine oil.

Customer Benefits with *DURAGARD® DIAMOND PLATE PROTECTION®*

- * Meets or Exceeds warranty requirements of engine manufacturers that require a type API CK-4/SN premium 100% synthetic SAE 5W-40 motor oil.
- * Exceeds performance of current API CJ-4 oils.
- * (HTHS) High-temperature, High-shear viscosity.
- * Improved shear stability
- * More oxidization protection for hotter, heavy-duty engines
- * Minimizes acid formation
- * Reduced deposits
- * Extended drain intervals
- * Backwards compatible for all engines currently requiring CJ-4
- * Meets current 2017 and newer specifications requiring CK-4
- * Meets FORD WSS-M2C171-F1 2017 & prior specifications.

Application Specifications:

DURAGARD® **DIAMOND SYNTHETIC**® SAE **5W-40 API CK-4 ENGINE OIL**

This product meets, or exceeds the requirements similar to the following manufacturers and global specifications:

2017 and Newer Compatibility

API CK-4 SN

Cummins 20086
Detroit Diesel 938K222
Ford WSS-M2C171-F1
Mack EOS-4.5
MAN 3575
MTU 2.1
Renault RLD-4
Volvo VDS-4.5

2016 and Prior Backwards Compatibility

API CJ-4, CI-4 PLUS, CI-4, CH-4, CG-4, CF-2, CF

API SM, SL, SJ, SH, SG, SF, SE, SD, SC

ACEA E9, E7, E5, E3, E2, E7-04

AGCO Tractors

Agco (Deutz Allis)

Allison C-4

Allis Chalmers

CASE IH

CAT ECF-3 (ACERTTM)/ECF-3, ECF-2, ECF-1-A

MAN 3275, 270

Chrysler MS-6395-G

CUMMINS NTC 400, CES 20081, 20077, 20076

Dept. of Defense (CID)A-A-52039A/A-A-52036A

CID A-A-52306, MIL-PRF-2104G

Detroit Diesel 7SE270, TYPE 1 & 2

Detroit Diesel 93K218, 93K215, 93K214

EMA LRG-1

FORD TRACTORS

Ford WSS-M2C171-D

Global DHD-1/DH-1

INTERNATIONAL HARVESTER

John Deere

JASO DH-2

J.I. CASE

KUBOTA

Mack EO-O PREM PLUS, EO-O '07, EO-N PREM /

PLUS '03, EO-M, EO-M PLUS, EO- O/N/M/L/

PREM+, EO-K2, AND PRIOR

Massey Ferguson

Mercedes 228.5, 228.31, 228.3

MIL-L-46152/MIL-L-2104F 2

MTU TYPE I, TYPE II

Navistar TSI-85-6

Renault RLD-3

White/Volvo VDS-4, VDX-3, VDS-2

Consult your manufacturer's specifications for information and use.

Product Containers Available:

Bulk * 55 gal. * 30 gal. * 5 gal. pails * 2.5 gal/2pk * 1 gal./3pack

Typical Physical Specifications:

SAE Grade 5W-40

Product Code: DURCK45/40SYNxx

INSPECTION INFORMATION	TEST METHOD	TYPICAL VALUE
Gravity, °API	ASTM D287	33.57
Specific Gravity @60°F (15.6°C)	ASTM D4052	0.8572
Viscosity @ 40°C cSt	ASTM D445	87.75
Viscosity @ 100°C cSt	ASTM D445	14.76
Viscosity Index	ASTM D2270	177
Pour Point °C (°F)	ASTM D5950	-45 °C (-49 °F)
Cold Cranking Simulator at (°C), cP	ASTM D5293	6535 (-30)
High Temperature / High Shear Vis at 150 °C, cP	ASTM D5481	3.5
Noack Volatility, % loss	ASTM D6375	13
Color	ASTM D1500	2.5
Zinc, wt. %	ASTM D5185	0.127
Phosphorus, wt. %	ASTM D5185	0.115
Calcium, wt. %	ASTM D5185	0.082
Sulfur, wt. %	ASTM D4951	0.314
Magnesium, wt. %	ASTM D5185	0.116
Sulfated Ash, wt. %	ASTM D874	0.99
Nitrogen, wt. %	ASTM D4629	0.124
Pumping Viscosity at (°C), cP	ASTM D4684	24,113 (-35)
TBN, mgKOH/g	ASTM D2896	10

Typical test data average values only, minor variations which do not affect product performance are to be expected during normal manufacturing.

READ ENTIRE SDS BULLETIN FOR HANDLING AND SAFETY INFORMATION



ADVANTAGE

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