



Technical Data Sheet

Updated: 4/5/2018

HOT SHOT'S SECRET BLUE DIAMOND PAO 5W-40 FULL SYNTHETIC Ultimate Engine Oil

Product Overview

Blue Diamond PAO 5W-40 is a 100% pure poly- α -olefin (PAO) Group IV synthetic oil that requires a very small amount of viscosity improvers to meet the weight specifications. The infusion of our patented FR3 Nano-Technology and CK-4 additive package provides unsurpassed levels of longevity and performance while keeping the oil cleaner longer and providing better mileage and horsepower.

Blue Diamond PAO 5W-40 is a fully formulated CK-4 motor oil with high detergency, exceptional oxidation and thermal stability that prevents deposit formation and oil breakdown making longer drain intervals possible. In addition to exceeding the API CK-4 specification, Blue Diamond PAO 5W-40 meets the requirements from Ford for added wear protection as stated in Ford Specification WSS-M2C171-F1. Not all CK-4 specification oils meet both the CK-4 and the Ford specification.

Applications and Uses

Blue Diamond PAO 5W-40 is recommended for heavy-duty trucks, agriculture, construction and industrial equipment, drilling rigs, stationary engines, turbo charged and racing engines. The CK-4 specification is backwards compatible with CJ-4, CI-4 and CI-4 Plus specification oils.

Blue Diamond PAO 5W-40 is formulated for extreme cold temperature as well as extreme high temperature service and its 5W viscosity at low temperatures allows it to replace conventional 5W-30, 10W-30, and 15W-40 oils in diesel engines.

OEM Performance

Caterpillar ECF-1, ECF-2 and ECF-3
Detroit Diesel DDC93K218, DDC93K222
Cummins CES 20081, CES 20086
Mack EO-O Premium Plus, EOS-4.5
Deutz DQC III-10 LA
API CK-4, CJ-4, CI-4, CI-4 Plus
Ford WSS-M2C171-F1
Volvo VDS-4, VDS-4.5
ACEA E7-12, E9-12
MB 228.31
MAN 3575
JASO DH-2
Renault VI RLD-3, RLD-4



Benefits

- Improves cold weather starting compared to conventional oils
- Improves fuel economy up to 3%
- Lowers oil consumption 78% over CJ-4 spec oils
- Reduces wear 71% over CJ-4 spec oils
- Improves power
- Increases film strength
- Improved oxidation stability
- Improved aeration control
- Handles soot 46% better than CJ-4
- Widens operating temperature Range
- Anti-Rust protection
- Reduces DPF plugging
- Reduces shearing
- Reduces friction
- Reduces deposit formation
- Reduces noise and vibration
- Extends oil change interval
- Extends injector, turbo and engine life

Blue Diamond PAO 5W-40 can be ran up to 3 times longer than the manufacturer’s recommended specifications. With the combined use of a Frantz Bypass Oil Filter, scheduled oil analysis program, and Hot Shot’s Secret TBN booster, your oil can last up to 100,000 miles. Your oil filter should be changed at the manufacturer’s recommended interval even if your oil is in spec.

Packaging

Available in:

- 1 quart bottle
- 1 gallon jug
- 5 gallon bucket
- 55 gallon drum

Typical Properties

Property	Test Method	Result
Total Base Number, mg/g	D-2896	9.7
Sulfated ash, %	D-874	1.0
Cold Cranking at -30° C, cP	D-5293	5826
Viscosity at 40° C, cSt	D-445	99.3
Viscosity at 100° C, cSt	D-445	14.1
Noack Volatility, wt %	D-5800	7.6
Minimum flash point, °C (°F)	D-92	245°C (473°F)
Stable pour point, °C (°F)	D-97	-45°C (-47°F)

The Safety Data Sheet is available at <https://www.hotshotsecret.com/print-documents/>.