



PRODUCT INFORMATION & DATA SHEET

D1 GOLD 4X4 SAE 5W-40

D1 GOLD 4X4 is a uniquely developed, high HTHS (High-Temperature High-Shear) viscosity, high-polarity ester-based diesel engine oil for enthusiasts who push their pickups to the limit. It guarantees peak engine performance, rock-solid reliability, and unrivalled protection, no matter the environment or challenge.

Featuring proprietary P-12 Ester technology, it provides strong lubricating film and maximum shear stability, which helps prolong engine life, ensuring optimal performance during off-road adventures, heavy towing, long haul, even under extreme temperatures. Its leading-edge synthetic and additive technology minimize soot accumulation, reduce viscosity changes, and minimize shear stresses, offering superior protection and sustained lubrication. With high flash point and low volatility properties, it supports longer drain intervals, keeping your engine clean and running smoothly. Surpassing the stringent API CK-4 standards, it provides exceptional anti-corrosion, anti-scuff, anti-wear, oxidation stability, foam and aeration control, while also improving fuel efficiency. This oil ensures utmost compatibility with modern exhaust after-treatment systems (EGR, DPF, TWC, SCR) thanks to its reduced-SAPS composition, making it the most ideal choice for the demanding needs of high-performance 4X4s vehicles.

Industry & Performance Levels

API CK-4/SN, ACEA E8/E11, Chrysler MS10902, Cummins CES 20086, Ford WSS-M2C171-E, Ford WSS-M2C 171-F1, Isuzu, JASO DH-2, MB 228.31, MB 228.51, Mitsubishi, Nissan, Toyota, Volvo VDS-4.5

Key Benefits

- P-12 Esters improve lubrication and shear stability for stronger truck engine performance.
- Enhanced solvency, more effective at cleaning and preventing sludge and deposits buildup.
- Higher and stable viscosity index (VI) providing consistent lubrication at all temperatures.
- Exceptional shear stability maintains film strength and viscosity under mechanical stress.
- Excellent high-temperature stability and oxidation resistance ensuring longer oil life.
- Outstanding cold-cranking ability makes it ideal to use in extreme cold temperature zones.
- Low pour point properties protect turbocharger against oil starvation at subzero temperatures.
- Superb friction coefficient provides wear reduction and smoother operation at all driving modes.
- Superior lubrication, reducing friction and contributing to fuel efficiency and CO2 reduction.
- Low volatility (burn-off) rate minimizes evaporation loss and helps reduce oil consumption.
- Perfect to use with the latest EURO VI turbocharging and direct injection diesel engines.

Areas of Application

Developed specifically for the latest generation of high-speed pickups and 4X4 vehicles operate even under the maximum load, this oil is suitable for both diesel and gasoline engines, with and without turbocharging direct injection, equipped with DPF, EGR and/or SCR NOx reduction systems. The API CK-4/SN standards are fully backward compatible. Suitable for long drain interval if recommended.

Service Recommendation

Follow the oil drain interval required by the respective manufacturers. Observe the owner's manual booklet. Recommend to flush before add in new oil. Change oil filter at time of oil change.

Commercially Available Product Compatibility

Our diesel engine oil is compatible with any synthetic and conventional motor oil. Maximum performance is assured only when used on its own, without being mixed with other oils.

Typical properties

<u>SAE Viscosity</u>		<u>5W-40</u>
Viscosity Index (VI)	ASTM D2270	179
Viscosity at 100 °C; mm ² /s	ASTM D445	14.3
Viscosity at 40 °C; mm ² /s	ASTM D445	88.6
Density at 15 °C; kg/m ³	ASTM D4052	855.0
HTHS Viscosity at 150 °C; mPa.s	ASTM D5481	> 3.5
CCS Viscosity at -30 °C; mPa.s	ASTM D5293	< 6600
Flash Point; °C	ASTM D92	242
Pour Point; °C	ASTM D97	-45
Sulfated Ash; mass%	ASTM D874	0.99
Total Base Number; mgKOH/g	ASTM D2896	10.8

The information show herein is subject to change without noticed. The product indicated here have been developed by PRINCE LUBRICANTS for use in the areas of applications shown. We reserve all right to alter the characteristics and product properties to align with continually technical development.

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