



PRODUCT INFORMATION & DATA SHEET

PRINCE® FSR GT Racing

The Ultimate 100% Synthetic Double Ester Racing Oil.

FSR GT Racing is our exclusively developed high-polarity and high HTHS Viscosity racing oil for the most challenging track and professional use. The remarkable combination of VHVI Double Ester (P-9 + P-12) and Polyalphaolefins (PAOs) base stocks, and cutting-edge 'race-ready' additive and polymer systems, including appropriate levels of phosphorus and zinc has allowed this superior motor oil to perform reliably over a wide range of Rpm and operating temperatures, under the most extreme driving conditions ever. The base stocks formulation of this racing oil helps dissipate heat more quickly, resulting in lower oil temperatures, reduced high-temperature deposits, varnish and sludge formation, and extended oil life. This motor oil has ensured maximum power and torque delivery without compromising lasting protection against oil cavitation and wear in high revving, heavily loaded engines. FSR GT Racing has been regularly tested with tuning partners, and attested by professional drivers at all levels.

The advantageousness of the Double Ester formulation

Our proprietary Double Ester Technology is geared specifically to deliver the optimum levels of confidence, performance, and protection for severe track applications. The molecular structures of VHVI P-9 and P-12 exhibit superior chemical bonding mechanisms, allowing them to adhere robustly to metal surfaces to form an extremely stable lubricating layer. This formidable adhesion requires significant amounts of energy to vaporize, resulting in high flash point and low volatility properties. As result, they are capable of preventing breakdown and decomposition due to extreme heat, shear forces and stresses.

Our track-orientated FSR GT Racing guarantees you:

- ✓ Double Ester formulation ensure maximum shear and viscosity stability, providing the greatest protection even during the extended race, e.g. 24 Hour Endurance.
- ✓ Boosted levels of anti-wear over passenger car motor oils, with unique Tungsten Disulfides and ZDDP, giving optimal protection under extreme-pressure conditions.
- ✓ Exceptional friction properties offer the least friction, delivering the highest power output and quick Rpm responsiveness, and able to reduce noise for better drivability.
- ✓ Easier engine startup facilitates rapid pressure buildup and flow to vital engine parts at low temperature, effectively preventing cold-start wear and corrosion.
- ✓ High detergency performance allows for better engine cleanliness, by eliminating and preventing deposits and residues in critical engine areas, especially in the turbocharger.
- ✓ Improved antioxidant capabilities at high operating temperatures, allow for prolonged engine and oil life, maintaining reliable engine protection and oil performance.
- ✓ Low volatility characteristics ensure minimal tendency of evaporation, thereby reducing oil consumption and capable of maintaining stable oil pressure level.
- ✓ Our specially crafted chemistry is compatible with all types of powerful racing fuels, including high-octane gasoline, ethanol (E85), methanol, and biofuels.

Areas of application

Initially developed for extreme competitive applications, including GT, drift, endurance, touring, rally cross, off-road, etc. This oil is specifically designed for powerful and tuned, gasoline and alcohol-fueled four-stroke engines, accommodating a wide variety of engine designs, including large or downsized displacement, supercharged, turbocharged, carburetor and direct injection systems.

This racing oil is compatible with all types of race fuels, e.g., high-octane gasoline, biofuel, ethanol (up to E85), and methanol (CH₃OH).

This oil is not recommended for street-use passenger cars with standard and extended drain intervals. This oil is unsuitable for use in passenger cars with emission reduction system e.g., catalytic converter installed.

Typical properties

<u>SAE Viscosity</u>	<u>0W-30</u>	<u>0W-40</u>	<u>5W-30</u>	<u>5W-40</u>	<u>10W-50</u>	<u>10W-60</u>
Viscosity Index (VI) ; ASTM D2270	189	194	181	183	182	187
Viscosity at 100 °C; mm ² /s ; ASTM D445	11.2	13.5	11.4	13.7	18.0	23.5
Viscosity at 40 °C; mm ² /s ; ASTM D445	56.0	71.3	63.8	79.0	123.7	160.6
Density at 20 °C; kg/m ³ ; ASTM D4052	845.0	849.0	851.0	852.0	859.0	857.0
HTHS Viscosity at 150 °C; cP ; ASTM5481	3.6	3.9	3.9	4.2	5.4	5.7
Flash Point; °C ; ASTM D92	234	236	234	236	238	246
Pour Point; °C ; ASTM D97	-51	-51	-48	-48	-44	-45
TBN; mgKOH/g ; ATSM D2896	7.5	8.0	7.5	8.0	8.0	8.5

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 with our tuning partners.

Service recommendation

Observe owner's manual or consult with your tuning partner for oil change interval. Oil change intervals in race conditions can vary widely, meaning that an oil change can be done after one or a couple of races. We recommend changing the racing oil more frequently.

We do not recommend mixing this oil with conventional motor oil. Peak performance is guaranteed only when used alone without mixing. A complete oil change is highly recommended.

While some engines benefit from break-in oil, its not obligatory. We suggest consulting with your engine builder to assess the best course of action. Nonetheless, using aftermarket additive products along with this racing oil is not recommended.