



## PRODUCT INFORMATION & DATA SHEET

### PRINCE® FSe SAE 5W-20

The Modern-day Fuel-efficient Fully Synthetic Motor Oil.

PRINCE® FSe SAE 5W-20 is a state-of-the-art, decreased HTHS (High Shear High-Stable) viscosity motor oil that has been engineered with the most advanced additive technology to deliver maximum fuel economy, environmental protection, wear protection and engine cleanliness.

PRINCE® FSe series has been developed to meet the latest stringent industry requirements of API SP Resource Conserving and ILSAC GF-6A standards that deliver more comprehensive engine protection and improved fuel economy than commercially available motor oils which granted API SN Plus/ API SN as well as ILSAC GF-5 standards. Our FSe series is highly recommended for use in modern gasoline engines equipped in vast American and Asian vehicles, including engines with Acura/ Honda HTO-06 specification.

This product features specifically designed friction modifier and anti-wear additive package for unsurpassed metal-to-metal wear protection, especially for modern turbocharged and direct fuel injection engines, and particularly those equipped with timing chain belt and 'idle-stop' system. This motor oil helps prevent pre-ignition event occur at low-speed (LSPI).

This motor oil meets or even exceeds the following list of OEM's approvals and standards:

API SP Resource Conserving, API SN Plus, Chrysler MS-6395/MS-13340, Fiat 9.55535-CR1, Ford WSS-M2C945-A/WSS-M2C945-B1/WSS-M2C960-A1, GM 6094M/dexos1 Gen2, Honda/Acura HTO-06, ILSAC GF-6A

Some of the benefits of using this motor oil:

- Contains specially formulated anti-wear additive technology to reduce wear on engine moving parts, effectively prolong engine life.
- Designed with thermal resistance capable to resist deposits build-up and black sludge formation to maintain and improve engine cleanliness.
- Effectively prevent the events of low-speeds pre-ignition (LSPI) to avoid engine burden and serious damage.
- Excellent ageing and oxidation stability, minimizes oil degradation and additive depletion within the designated drain interval, well assured motor oil to 'stay-in-grade'.
- Exceptional oil performance in extremely low temperatures, promotes quicker oil penetrating to allow reliable engine protection.
- Fuel economy can be well achieved with the employ of state-of-the-art additive package that include specially crafted friction modifier.
- High and stable viscosity index (VI) of this motor oil offers outstanding overall lubrication performance from casual to extreme operating conditions.
- Low evaporation loss behavior that helps significantly lowered motor oil consumption and lessen pollution.
- Tested safe on and protects all catalytic converters and gasoline particulate filters.

## Areas of application

Primarily developed for various latest generation American and Asian vehicles. For use in passenger cars that are fitted with hybrid or non-hybrid gasoline engine that specified using an API SP Resource Conserving or SN Plus motor oil that features lowered viscosity and low friction properties. This motor oil is backward compatible with all previous API specifications as well as ILSAC GF-5, GF-4 standards.

Suitable to use in natural aspirated, supercharged, turbocharged, fuel direct injection, multi-valve engines that required the viscosity and any OEM's specifications of this motor oil. Well-suited for application in gasoline engines with catalytic converters and gasoline particulate filter (GPF). However, this motor oil is not recommended for use in modern diesel engines with exhaust emissions devices.

## Typical properties

<u>SAE Viscosity</u>		<b>5W-20</b>
Viscosity Index (VI)	ASTM D2270	164
Viscosity at 100 °C; mm <sup>2</sup> /s	ASTM D445	8.5
Viscosity at 40 °C; mm <sup>2</sup> /s	ASTM D445	47.3
Density at 15 °C; kg/m <sup>3</sup>	ASTM D4052	847.0
HTHS Viscosity at 150 °C; cP	ASTM D4683	2.85
Flash Point; °C	ASTM D92	232
Pour Point; °C	ASTM D97	-43

## Service recommendations

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 fully synthetic motor oil is compatible with other fully synthetic, synthetic and/or conventional motor oils. Peak performance is guaranteed only upon using alone without mixing with other motor oils. Our motor oil products are designed and developed with appropriate additive package. Hence, aftermarket oil additive products are not recommended for used alongside.

## Product availability

This product may not be available locally. Contact your local distributor.

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.