



Shandong Ribang New Energy Technology Co., Ltd.

Technical Data Sheet (TDS)

Product Model: SP Fully Synthetic 5W-40 Engine Oil

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Basic Product Information

Product Name: SP Fully Synthetic 5W-40 Engine Oil

Viscosity Grade: SAE 5W-40

Compliance Standards: API SP, GB 11121-2025 Gasoline Engine Oil,
Q/11121RBSH150-2020

Product Description

Formulated with deeply refined high viscosity index base oil and high-quality multifunctional composite additives, this product features a low-phosphorus eco-friendly formula. It meets all-scenario application requirements for gasoline engines of SAE 5W-40 viscosity grade, balancing lubrication performance with cost-effectiveness. Compliant with API SP and other specifications meeting China 6a emission standards, it is well-suited for daily driving conditions including frequent start-stop and urban congested traffic.

Performance Level

Friction Performance and Material Compatibility:

The product's excellent material compatibility ensures highly stable power output and reduces wear. Its superior detergent-dispersant performance protects and extends the service life of the engine.

Anti-wear Protection and Shear Stability:

Utilizing advanced additives and other materials, the product exhibits excellent mechanical shear stability, providing comprehensive protection for equipment under load.

Viscosity and Viscosity-Temperature Characteristics:

The product features appropriate viscosity and excellent viscosity-temperature characteristics, demonstrating superior low-temperature performance and good fluidity. It meets the operational demands of machinery under both high and low temperatures, providing protection from the moment the equipment starts up.

Oxidation Stability:

The product's high-quality formulation delivers superior oxidation stability, effectively extending oil life and oil change intervals.

Application Scope and Compliance Specifications

Compliance Standards: API SP, GB 11121-2025 Gasoline Engine Oil, Q/11121RBSH150-2020

Applicable Vehicles: Passenger vehicles, economy family cars and compact sedans produced after 2020, including models of Toyota, Nissan, General Motors, Hyundai, KIA and other brands.

For viscosity selection and oil change intervals, please refer to the vehicle owner's manual or the original manufacturer's recommendations.

Typical Physical and Chemical Performance Indicators

Performance	Typical Values	Unit	Test Method
Density (20°C), g/cm³	0.846	g/cm³	SH/T 0604
Kinematic Viscosity (100°C), cSt	13.99	cSt	GB/T 265
Kinematic viscosity (40°C), cSt	-	cSt	GB/T 265
Pour point, °C	-39	°C	GB/T 3535
Flash point (open cup), °C	223	°C	GB/T 3536

The data in this technical specification are typical average laboratory values, for technical reference only, and do not constitute any quality commitment or acceptance basis. The Company reserves the right to optimize the formula and fine-tune technical indicators to ensure the product always meets the requirements of API SP, GB 11121-2025 and Q/11121RBSH150-2020. The typical numerical values of the product may

vary slightly by production batch in the future, which will not affect its core performance.

Packaging Method: Drum

- **Handling/Storage Precautions:**
- **Follow standard lubricant handling procedures.**
- **Store in a well-ventilated, dry location, away from high temperatures and direct sunlight.**
- **For detailed data, please refer to the relevant MSDS.**
- **For additional information, contact Ribang Company.**

July 10, 2026

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