

ENEOS PREMIUM MOTOR OIL SUSTINA

Eco-friendly Ultra-fuel-saving Clean Engine Oils

In recent years, energy conservation has progressed and the interest in the environment protection from emissions such as carbon dioxide is growing. Therefore, automobile manufacturers are increasing the production of low-emission certified vehicles and fuel-saving standard achievement of cars becomes more and more concern year by year. In order to achieve fuel efficiency standards, the engine has been designed by introducing a variety of technologies, and so the engine oil has been expected to support the fuel-saving effect by lowering the oil viscosity. **SUSTINA** range includes gasoline and diesel engine oils that achieves much higher fuel-saving performance and engine protection performance than conventional oil by ENEOS original technologies including high viscosity index base oils. In addition, the ZP additive technology helps to maintain engine clean inside, free of sludge and dangerous acids thanks to minimizing Sulphur content. **SUSTINA** is the ideal high-performance oil for the engine.

● Special Features

1. ENEOS Original Oil Technology

SUSTINA has been engineered with a combination of WBASE and ZP technology.

The WBASE is base oil of the world's highest quality level. The viscosity index of this oil is about 15% greater than the conventional synthetic base oils, which means that the viscosity change of this oil associated with the engine temperature change is substantially smaller. Therefore the oil can offer low viscosity and low flow resistance in the engine already at low temperatures and during cold start. In addition, since pressure-viscosity coefficient is lower by about 5% than conventional base oils, it can greatly reduce the viscous resistance especially at high pressure points. **SUSTINA** using WBASE which has these two properties exhibits high fuel-saving performance.

The ZP technology* is ENEOS original technology to optimize the blend of own additive ZP (Zinc di-alkyl phosphate). Although ZDTP (Zinc di-alkyl di-thiophosphate) has been used as an additive for conventional engine oils, ZDTP comprises sulfur, and it is thought that one of the causes that degrade the engine oil is sulfuric acid decomposed inside the engine. ZP is a ZDTP with sulfur-substituted compounds by oxygen, can extend the performance of the additive for the long duration suppressing the generation of sulfuric acid. **SUSTINA** is premium oil engineered with WBASE and ZP technology, which

offers higher than conventional oils protection for the engine from sludge and demonstrates high fuel-saving performance for a longer time.

*ZP technology has won numerous awards such as "Chemical Technology Award, 2011" of the Chemical Society of Japan.

2. Performance

SUSTINA indicates the following three performances.

- (1) Fuel-efficiency improvement : 2% up (at maximum)*
- (2) Fuel-efficiency performance endurance: Doubled *
- (3) Cleaning performance endurance: Doubled*

* Comparison with GF-4 existing fuel-efficient oil (same viscosity grade)

● Applications

Gasoline engine oil for passenger car (For trouble prevention, please use proper viscosity grade oil for the car). 5W-30 and 5W-40 oil can be used for car and light van diesel engines.

● Containers

1-litre, 4-litre bottles

● Lineup of Viscosity

SAE Viscosity Grades:
0W-20, 0W-50, 5W-30, 5W-40

Typical properties of ENEOS PREMIUM MOTOR OIL SUSTINA

SAE grade	0W-20	0W-50	5W-30	5W-40
API Performance Grade	SN/RC	SN	SN	SN
ILSAC	GF-5	-	-	-
ACEA	-	-	C3	C3
Color(ASTM)	L4.0	L4.5	L5.0	L4.0
Density, g/cm ³	0.842	0.845	0.845	0.847
Kinematic viscosity (40 °C), mm ² /s	32.7	95.4	67.9	75.3
(100 °C), mm ² /s	7.9	17.3	10.1	13.3
Viscosity index	229	199	176	180
Flash point (COC), °C	226	224	238	234
Pour point, °C	-45	-47.5	-45	-45
Acid number, mgKOH/g	2.1	2.0	1.5	2.0
Base number (ASTM D664), mgKOH/g	7.2	6.7	6.4	6.6

Note: the typical properties are subject to change without notice. (August 2019)



Handling Precautions

▼ Follow these precautions when handling this product.

<p>! CAUTION</p> <p>Handling Precautions</p>	<ul style="list-style-type: none"> • Draining oil from a hot engine can cause <u>burns</u>. Drain oil only <u>after the engine has cooled</u>. • <u>Inflammation can occur if oil enters the eyes</u>. When handling this oil, wear <u>protective goggles</u> or take other measures to <u>prevent eye contact</u>. • <u>Inflammation can occur if oil comes into contact with skin</u>. When handling this oil, wear <u>protective gloves</u> or take other measures to <u>prevent skin contact</u>. • Do not drink this oil. (Swallowing this oil can cause diarrhea and nausea.) • <u>Keep out of reach of children</u>. • Read the Safety Data Sheet (SDS) for this product before using the product. Obtain the SDS from where you purchased the product.
<p>First Aid</p>	<ul style="list-style-type: none"> • In case of eye contact, rinse eyes thoroughly with clean water and consult with a physician. • In case of skin contact, wash skin thoroughly with soap and water. • If this oil is swallowed, do not induce vomiting. Consult with a physician immediately.
<p>Disposal of Used Oil and Containers</p>	<ul style="list-style-type: none"> • Do not apply pressure to empty containers. The containers may burst if pressure is applied. • Do not weld, heat, drill, or cut the containers. The remaining oil may ignite and the containers may explode. • Follow all applicable laws and regulations when disposing of used oil or containers. If you are unsure of the proper disposal methods, consult first with the seller of the oil.
<p>Storage Method</p>	<p>Seal the container tightly after use in order to prevent dirt, moisture, etc., from entering the oil. Store in a dark location. Avoid direct sunlight.</p>

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