

ENEOS PREMIUM MOTOR OIL SUSTINA

Eco-friendly Ultra-fuel-saving Engine Oils

In recent years, energy conservation has progressed and the interest in the environment of emissions such as carbon dioxide is growing. Therefore, automobile manufacturers are increasing the production of low-emission certified vehicles and fuel-saving standard achievement cars year by year. In order to achieve fuel efficiency standards, the engine has been designed by introducing a variety of technologies, and also the engine oil has been expected the fuel-saving effect by lowering the oil viscosity. **SUSTINA** is gasoline engine oil that achieves much higher fuel-saving performance and engine protection performance than conventional oil by ENEOS original technologies. While average vehicle age is extended, **SUSTINA** is the ideal high-performance oil to the engine.

● Special Features

1. ENEOS Original Oil Technology

SUSTINA has been made by a combination of WBASE and ZP technology.

The WBASE is base oil of the world's highest level. The viscosity index of this oil is about 15% greater than the conventional synthetic base oils, and characterized by viscosity change associated with the temperature change is small. Therefore the flow resistance in the engine even at low temperatures significantly reduced. In addition, since pressure-viscosity coefficient is low 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 sulfur-substituted compounds by oxygen, can last the performance of the additive for the long duration suppressing the generation of sulfuric acid.

SUSTINA is premium oil realized by WBASE and ZP technology, which can protect the engine from sludge and demonstrate high fuel-saving performance for a long 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)

3. Correspond to the latest standards of API (American Petroleum Institute)

SUSTINA is high performance engine oil that acquired the latest standards for gasoline engine oil, API SN.

● Applications

Gasoline engine oil for passenger car (For trouble prevention, please use proper viscosity grade oil for the car)

5W-40 oil can be used for car and light van diesel engines.

● Lineup of Viscosity

SAE Viscosity Grade

0W-50, 0W-20, 5W-20, 5W-30, 5W-40

● Typical properties of ENEOS PREMIUM MOTOR OIL SUSTINA

SAE grade	0W-50	0W-20	5W-20	5W-30	5W-40
API Performance Grade	SN	SN/RC	SN/RC	SN/RC	SN
ILSAC	-	GF-5	GF-5	GF-5	-
ACEA	-	-	-	-	C3,A3/B4
Color(ASTM)	L4.5	L4.0	L4.0	L4.0	L4.0
Density, g/cm ³	0.845	0.842	0.846	0.848	0.847
Kinematic viscosity(40 °C), mm ² /s	95.4	32.7	39.5	51.5	75.3
(100 °C), mm ² /s	17.3	7.9	8.0	10.3	13.3
Viscosity index	199	229	179	194	180
Flash point (COC), °C	224	226	232	238	234
Pour point, °C	-47.5	-45	-45	-45	-45
Acid number, mgKOH/g	2.0	2.1	2.0	2.3	2.0
Base number (ASTM D664), mgKOH/g	6.7	7.2	7.2	7.0	6.6

Note: the typical properties are subject to change without notice. (July 2014)



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>