

MAR-1025-2104E

# GAS ENGINE OIL K SERIES

## Long life type low ash gas engine oil for large engines

The total energy system (TES) with the gas engine is the system to supply electricity and power by the gas engine which uses city gas as fuel, and performs hot water supply and the air-conditioning in facilities using the exhaust heat. Gas engine oil used for this system is always exposed to the severe condition of the high temperature. **GAS ENGINE OIL K SERIES** is high performance low ash gas engine oil for large size gas engines, which achieves long-life by the adoption of the new additives.

### ● Special Features

#### 1. Long-life Type Oil

**GAS ENGINE OIL K SERIES** was able to satisfy the long-life performance and contradicting demand of the reduction of the deposit in the engine by the development and adoption of the new additives.

**GAS ENGINE OIL K SERIES** is superior in long-time base number retention and is the oil of long-life type, which has the good performance to restrain acid number increase and viscosity increase.

#### 2. Outstanding Thermal & Oxidation Stability

In the case of a gas engine, the lubricant is deteriorated by the oxidation easily because it is exposed to high temperatures for a long time.

**GAS ENGINE OIL K SERIES** is superior in thermal and oxidation stabilities and can maintain good performance for a long time.

#### 3. Excellent in high temperature cleanliness and anti-corrosion performance of bearings

**GAS ENGINE OIL K SERIES** maintains cleanliness of gas engine and prevents corrosion wear of copper - lead bearing by optimum combination of new additives and highly heat - resistant metallic detergent and dispersant.

### ● Oil exchange period

Please follow the instruction manual of the engine manufacturer.

### ● Containers

200-liter drums, 20-liter pail cans

### ● Typical properties of GAS ENGINE OIL K SERIES

SAE viscosity grade		30	40
Color (ASTM)		L2.5	L3.0
Density (15 °C)	g/ cm <sup>3</sup>	0.881	0.889
Kinematic Viscosity (40 °C)	mm <sup>2</sup> /s	94.22	156.0
	(100 °C)	11.49	15.88
	mm <sup>2</sup> /s	110	105
Viscosity Index		264	280
Flash Point (COC)	°C	-27.5	-27.5
Pour Point	°C	1.46	1.45
Acid Number		3.52	3.52
mgKOH/g		7.26	7.34
Base Number (ASTM D664)		0.52	0.51
	mgKOH/g		
Base Number (ASTM D2896)			
	mgKOH/g		
Sulfated Ash	mass%		
Foaming Tendency tendency-stability			
Sequence II (94°C)	mL	10-nil	20 - nil

Note: The typical properties may be changed without notice.  
(March 2017)



## Handling Precautions

▼ Follow these precautions when handling this product.

<b>Composition :</b>	Base Oil, Additives
<b>Precautionary pictograms:</b>	Not applicable
<b>Signal word:</b>	Not applicable
<b>Hazard Statement:</b>	Not applicable
<b>Precautionary Statements:</b>	<ul style="list-style-type: none"><li>• Do not handle until all safety precautions have been read and understood.</li><li>• Wear protective gloves/protective clothing/eye protection/face protection.</li><li>• Do not allow the eyes to become exposed to the product. Do not swallow the product.</li><li>• Wash hands thoroughly after handling.</li><li>• Do not eat, drink or smoke when using this product.</li></ul>
<b>Prevention</b>	
<b>Response</b>	<ul style="list-style-type: none"><li>• IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.</li><li>• IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.</li><li>• If the eyes are exposed to the product: Rinse the eyes with plenty of running water and immediately contact a physician.</li><li>• IF ON SKIN: Wash with plenty of soap and water.</li></ul>
<b>Storage</b>	<ul style="list-style-type: none"><li>• The product must be stored in a cool, well-ventilated location where it will not be exposed to direct sunlight.</li><li>• Containers that have been opened must be tightly sealed.</li></ul>
<b>Disposal</b>	<ul style="list-style-type: none"><li>• Dispose of contents/container in accordance with local/regional/national/international regulations.</li><li>• If there are any doubts about proper methods of handling the product, contact the point of purchase before proceeding with usage.</li></ul>