MAR-1025-2403E

## **GAS ENGINE OIL K40**

## 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 K40** 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 K40 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 K40 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 K40 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 K40 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 drum, 20-liter pail can

#### Typical properties of GAS ENGINE OIL K40

SAE viscosity grade		40
Color (ASTM)		L3.0
Density (15°C)	g/ cm <sup>3</sup>	0.889
Kinematic Viscosity (40 °C	) $mm^2/s$	156.0
(100°C	$C) mm^2/s$	15.88
Viscosity Index		105
Flash Point (COC)	°C	280
Pour Point	°C	-27.5
Acid Number	mgKOH/g	1.45
Base Number (ASTM D4739) mgKOH/g		3.52
Base Number (ASTM D2896) mgKOH/g		7.34
Sulfated Ash	mass%	0.51
Foaming Tendency tendency		
Sequence II (94°C)	ml/ml	20/0

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



# Handling Precautions

### lacktriangledown Follow these precautions when handling this product.

Composition :	Page Oil(a) Additions	
-	Base Oil(s), Additives	
Hazard pictograms:	Not applicable	
Signal word:	Not applicable	
Hazard Statement:	Not applicable	
Precautionary Statements:	• Do not handle until all safety precautions have been read and understood.	
Prevention	Wear protective gloves/protective clothing/eye protection/face protection.	
	• Do not allow the eyes to become exposed to the product. Do not swallow the product.	
	Wash hands thoroughly after handling.	
	Do not eat, drink or smoke when using this product.	
Response	· IF SWALLOWED: Immediately call a POISON CENTER/doctor.	
	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.	
	If the eyes are exposed to the product: Rinse the eyes with plenty of running water and	
	immediately contact a physician.	
	• IF ON SKIN: Wash with plenty of soap and water.	
Storage	The product must be stored in a cool, well-ventilated location where it will not be exposed	
	to direct sunlight.	
	Containers that have been opened must be tightly sealed.	
Disposal	Dispose of contents/container in accordance with local/regional/national/international	
	regulations.	
	If there are any doubts about proper methods of handling the product, contact the point of	
	purchase before proceeding with usage.	