MAR-1004-2104E

TES OIL GL 40

Low Ash Gas Engine Oil

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. **TES OIL GL 40** is a high performance low ash gas engine oil suitable for gas engines of TES, which achieves long-life by its outstanding thermal and oxidation stability.

Special Features

1. 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.

TES OIL GL 40 is superior in thermal and oxidation stabilities and can maintain good performance for a long time.

2. Excellent Detergency

Metallic detergent keeps the engine clean. However, excess metallic detergent increases the deposit in the combustion chamber and gives an adverse effect on the engine.

TES OIL GL 40 maintains the cleanliness by the combination of suppressed amount of the metallic detergent and the superior dispersant, and has achieved a longer life.

3. Other Features

TES OIL GL 40 has proper viscosity to seal and reduce the friction between cylinder liners and pistons. In addition, it provides necessary performance as gas engine oil such as corrosion and rust prevention characteristics.

Oil exchange period

Please follow the instruction manual of the engine manufacturer.

Containers

200-liter drums, 20-liter pail cans

Typical properties of TES OIL GL 40

SAE viscosity grade		40
Color (ASTM)		L2.5
Density (15 °C)	g/ cm ³	0.889
Kinematic Viscosity (40 °C)	mm^2/s	134.8
(100 °C)	mm^2/s	14.38
Viscosity Index		105
Flash Point (COC)	$^{\circ}\mathrm{C}$	262
Pour Point	$^{\circ}\mathrm{C}$	-12.5
Acid Number	mgKOH/g	1.63
Base Number (ASTM D664)	mgKOH/g	3.84
Sulfated Ash	mass%	0.50
Copper Strip Corrosion (100 °C, 3h)		1
Rust Prevention (Distilled Water,60 °C,24h)		Passed

Note: the typical properties are subject to change without notice. (June 2011)



Handling **Precautions**

lacktriangledown Follow these precautions when handling this product.

Composition:	Base Oil, Additives
Precautionary 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 or doctor/physician.
	• 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.