

# 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 <sup>3</sup>	0.889
Kinematic Viscosity (40°C)	mm <sup>2</sup> /s	134.8
	(100°C) mm <sup>2</sup> /s	14.38
Viscosity Index		105
Flash Point (COC)	°C	262
Pour Point	°C	-12.5
Acid Number	mgKOH/g	1.63
Base Number (ASTM D4739)	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

▼ Follow these precautions when handling this product.

<b>Composition :</b>	Base Oil(s), Additives
<b>Hazard pictograms:</b>	Not applicable
<b>Signal word:</b>	Not applicable
<b>Hazard Statement:</b>	Harmful to aquatic life Harmful to aquatic life with long lasting effects
<b>Precautionary Statements:</b> <b>Prevention</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>• Avoid release to the environment.</li><li>• Wash hands thoroughly after handling.</li><li>• Do not eat, drink or smoke when using this product.</li></ul>
<b>Response</b>	<ul style="list-style-type: none"><li>• IF SWALLOWED: Immediately call a POISON CENTER/doctor.</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>