

# GEARGRAND GL-5 80W-90

Gear oil for large vehicles such as buses and trucks with manual transmission and differential gears

**GEARGRAND GL-5 80W-90** is an automotive gear oil made from highly refined base oil and top-performance extreme-pressure agents, metal anticorrosion agents, detergent-dispersants and other additives. It meets the API service classification grade GL-5.

## ● Special Features

### 1. Automotive Gear Oil for Combined Use

The oil properties required for transmission gear and differential gear are different. For transmission oil, general properties as gear oil and also synchronizing characteristics which relates to shift operability and copper (part material) protective property are required. And for differential oil, anti-wear and extreme pressure properties are important under severe load conditions.

**GEARGRAND GL-5 80W-90** satisfies the properties demanded for both oils and can unify two kinds of oils to one. In addition, it can simply the inventory control and decrease the risk of false distribution.

### 2. Fuel Saving Effect

**GEARGRAND GL-5 80W-90** is oil of 80W-90 viscosity grade and indicates fuel saving effect because it reduces stirring resistance compared with single grade 90, and gives smooth shift operability at low temperature.

### 3. Longer-life Characteristics

**GEARGRAND GL-5 80W-90** exhibits excellent oxidation stability and thermal stability under demanding conditions for long periods of time due to an optimal formulation of base oils and the extreme-pressure agents and other additives.

### 4. Outstanding Lubrication Performance

**GEARGRAND GL-5 80W-90** contains optimized additives especially sulfur-phosphorus extreme-pressure

agent and provides excellent lubrication performance. The load carrying capacity of this oil meets the API service classification grade GL-5.

## ● Applications

Transmission and differential gears of large size vehicles

## ● Containers

200-liter drums, 20-liter cans

## ● Typical Properties of GEARGRAND GL-5 80W-90

API Service Grade		GL-5
SAE Viscosity Grade		80W-90
Color	(ASTM)	L2.0
Density	(15°C) g/cm <sup>3</sup>	0.891
Viscosity	(40°C) mm <sup>2</sup> /s	127.1
	(100°C) mm <sup>2</sup> /s	14.8
Viscosity Index		119
Flash Point	(COC) °C	226
Pour Point	°C	-32.5
Acid Number	mgKOH/g	1.33

Note: The typical properties may be changed without notice. (July 2015)



## Handling Precautions

▼ Follow these precautions when handling this product.

<b>Composition :</b>	Base Oil, Additives
<b>Precautionary pictograms:</b>	
<b>Signal word:</b>	Danger
<b>Hazard Statement:</b>	Causes serious eye damage May cause allergic skin reaction
<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>• Contaminated work clothing should not be allowed out of the workplace.</li><li>• Avoid breathing dust/fume/gas/mist/vapours/spray.</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 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><li>• Take off contaminated clothing and wash before reuse.</li><li>• If skin irritation or a rash occurs: Get medical advice/attention.</li><li>• IF IN EYES: Rinse continuously with water for several minutes.</li><li>• Remove contact lenses if present and easy to do. Continue rinsing.</li><li>• Immediately call a POISON CENTER or doctor/physician.</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>