AUT-0079-2104E

GEARGRAND DX GL-5

Fuel saving gear oil for vehicles

Environmental concerns such as energy saving and the reduction of carbon dioxide emission are increasing. The current market demands fuel saving oil for the large size diesel engine. The transportation industry is carrying out various actions such as adoption of digital tachograph, an eco-tire and a fuel saving diesel engine oil.

GEARGRAND DX GL-5 is gear oil that is a first kind in the market to purpose fuel saving in different perspective for large vehicles such as trucks and buses. Conventional gear oil aims fuel saving by reduction of viscosity. **GEARGRAND DX GL-5**, however, achieves fuel saving by reduction of frictional loss at the metal sites of gears and bearings without reduction of viscosity. This is done by the use of polar high-viscosity base material and our original additive technology. As a result, it improves fuel saving without compromising the reliability of gears and bearings.

Special Features

1. Excellent Fuel Saving Effect

GEARGRAND DX GL-5 is the fuel saving gear oil which developed with use of polar high-viscosity base material and our original additive technology. **GEARGRAND DX GL-5** reduces the friction loss due to the lack of oil film in the metal site of gears and bearings, etc. at the time of rapid acceleration and deceleration of the car.

2. Improved Reliability of the Differential Gear

Because the contact pressure between gears is high in the hypoid gear of the differential gear, the gear oil is exposed to very severe lubrication conditions. Excellent thermal and oxidation stability and high extreme pressure property are required to operate smoothly.

GEARGRAND DX GL-5 meets these performance requirements and suppresses the excessive heating of the metal sites by reducing the friction loss of gears and bearings efficiently. Therefore, it contributes to the durability and improved reliability of the differential gear.

3. 80W-90 gear oil is available for both transmission and differential gears

Required performance for gear oil differs between the transmission part and the differential part.

GEARGRAND DX GL-5 80W-90 is a transmission / differential gear oil that satisfies both requirements at a high level and demonstrates fuel saving performance.

Applications

SAE 90, SAE140: Differential gears for passenger cars, trucks, buses and construction machinery.

SAE 80W-90: Transmission gears and differential gears for passenger cars, trucks and buses and construction machinery (applicable to resin type synchronizer ring as well as brass)

Containers

200-liter drums, 20-liter cans

• Typical Properties of GEARGRAND DX GL-5

API Lubricant Service Designation			GL-5		
SAE Viscosity Grade			80W-90	90	140
Color	(ASTM)		L1.5	L1.5	L2.0
Density	(15°C)	g/cm ³	0.897	0.900	0.906
Viscosity	(40°C)	mm^2/s	163	191	381
	(100°C)	mm^2/s	18.0	17.9	28.2
Viscosity Index			122	102	101
Flash Point	(COC)	°C	220	224	222
Pour Point		°C	-30	-22.5	-15
Acid Number mgKOH/g		0.87	1.04	1.07	
Copper strip corrosion(100°C,3h)			1	1	1

Note: The typical properties may be changed without notice. (February 2019)



Handling **Precautions**

lacksquare Follow these precautions when handling this product.

Composition:	Base Oil, Additives			
Precautionary pictograms:	<u>(!</u>)			
Signal word:	Warning			
Hazard Statement:	May cause allergic skin reaction			
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.			
	Contaminated work clothing should not be allowed out of the workplace.			
	• Avoid breathing dust/fume/gas/mist/vapours/spray.			
	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.			
	• Take off contaminated clothing and wash before reuse.			
	• If skin irritation or a rash occurs: Get medical advice/attention.			
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.			