

GEAR GRAND 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.

GEAR GRAND DX GL-5 is a gear oil that is a first kind in the market to purpose fuel saving without changing the viscosity of the product for large vehicles such as trucks and buses. Conventional gear oil aims fuel saving by reduction of viscosity. However, **GEAR GRAND DX GL-5** 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

GEAR GRAND DX GL-5 is the fuel saving gear oil developed with use of polar high-viscosity base material and our original additive technology. **GEAR GRAND 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 low speed, rapid acceleration and deceleration of the car.

2. Improved Reliability of 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 of gear oil are required to operate gears smoothly.

GEAR GRAND 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 gears.

3. Longer-life Characteristics

GEAR GRAND DX GL-5 exhibits excellent oxidation stability and thermal stability due to an optimal formulation of base oils and the extreme-pressure agents and other additives. It can

be used for long periods of time even at high speed driving which tends to increase the oil temperature.

4. 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.

GEAR GRAND 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 : 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 drum, 20-liter can

● **Typical Properties of GEAR GRAND DX GL-5**

API Service Grade			GL-5	
SAE Viscosity Grade			80W-90	90
Color	(ASTM)		L2.0	L2.0
Density	(15°C)	g/cm ³	0.894	0.898
Kinematic Viscosity	(40°C)	mm ² /s	156	186
Kinematic Viscosity	(100°C)	mm ² /s	17.8	17.7
Viscosity Index			126	103
Flash Point	(COC)	°C	218	226
Pour Point		°C	-30.0	-22.5
Acid Number		mgKOH/g	0.94	1.00
Copper Strip Corrosion (100°C, 3h)			1	1

Note: The typical properties may be changed without notice. (July 2026)

● **Handling Precaution**

- **For the handling of this product:** Please read the Safety Data Sheet (SDS) for this oil and the handling precautions listed on the product container carefully before use.
- **Regarding obtaining the SDS:** Please note that Safety Data Sheets (SDS) should be obtained via commercial channels and cannot be provided by the ENEOS Customer Center.
- The properties and performance listed are based on measurements and insights from our testing methods and do not guarantee accuracy or completeness. The typical properties may be changed without notice.