

GEAR OIL GL-5

High-Grade Automotive Gear Oil (GL-5)

GEAR OIL GL-5 is a high-grade 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. Outstanding Lubrication Performance

GEAR OIL GL-5 is a gear oil that meets the API service classification grade GL-5. It provides outstanding lubricity in automotive transmissions and differential gears under a wide range of driving conditions.

When cars are driven on high-speed expressways, their gears are exposed to heavy loads. The additive blend of **GEAR OIL GL-5** has been optimized to provide superb extreme-pressure (EP) performance even under such tough driving conditions. The combination of sulfur and phosphorus EP agents provides excellent lubrication performance.

2. Excellent Oxidation Stability

Automobile gears become very hot when they are operated continuously at high loads. In fact, hypoid gears, which have very heavy contact pressures and fast sliding speeds, increase the oil temperature. EP agents are chemically active substances, and they

form an EP film through a reaction with the metal of the gears. At high temperatures, however, EP agents can decompose or polymerize when they come into contact with metal, resulting in the formation of harmful sludge.

GEAR OIL GL-5 exhibits excellent oxidation stability due to an optimal formulation of base oils and the extreme- pressure agents and other additives under demanding conditions for long periods of time.

● Grades

GEAR OIL GL-5 is available in versions 80, 90, 140 and 75W-90. These numbers indicate the SAE viscosity grades for gear oil.

● Applications

80, 90, 140 : Differential gears (especially hypoid gears) for automobiles, trucks and buses

75W-90 : Transmissions and differential for automobiles

● Containers

200-liter drums, 20-liter cans

● Typical Properties of GEAR OIL GL-5

SAE Viscosity Grade		80	90	140	75W-90
Color	(ASTM)	L1.5	L2.0	L2.5	L1.5
Density	(15°C) g/cm ³	0.888	0.897	0.903	0.892
Viscosity	(40°C) mm ² /s	75.8	184.6	386.7	75.9
	(100°C) mm ² /s	9.44	17.2	28.5	13.8
Viscosity index		101	100	101	189
Flash point	(COC) °C	234	234	236	208
Pour point	°C	-30.0	-25.0	-12.5	-45.0

Note: The typical properties may be changed without notice. (June 2011)




Handling Precautions

▼ Follow these precautions when handling this product.

GL-5 80、GL-5 90、GL-5 140

Composition :	Base Oil(s), Additives
Precautionary pictograms:	
Signal word:	Warning
Hazard Statement:	May cause an allergic skin reaction.
Precautionary Statements:	<ul style="list-style-type: none">• Do not handle until all safety precautions have been read and understood.• 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	<ul style="list-style-type: none">• IF SWALLOWED: Immediately call a POISON CENTER/doctor.• 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.• If skin irritation or a rash occurs: Get medical advice/attention.• Take off contaminated clothing and wash it before reuse.
Storage	<ul style="list-style-type: none">• 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	<ul style="list-style-type: none">• 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.

GL-5 75W-90

Composition :	Base Oil(s), Additives
Precautionary pictograms:	
Signal word:	Warning
Hazard Statement:	Causes serious eye irritation. May cause an allergic skin reaction.
Precautionary Statements:	<ul style="list-style-type: none"> • Do not handle until all safety precautions have been read and understood. • 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	<ul style="list-style-type: none"> • IF SWALLOWED: Immediately call a POISON CENTER/doctor. • 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. • If skin irritation or a rash occurs: Get medical advice/attention. • IF IN EYES: Rinse cautiously with water for several minutes. • Remove contact lenses if present and easy to do. Continue rinsing. • If eye irritation persists: Get medical advice/attention. • Take off contaminated clothing and wash it before reuse.
Storage	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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.