

Product	Sinopec GL-5 Heavy Duty Automotive Gear Oil
Summary	Product description Sinopec GL-5 Heavy Duty Automotive Gear Oil is a range of high-performance gear oils, available in five viscosity grades, formulated with high-quality synthetic and mineral base oils, and an advanced multifunctional additive system to meet the requirements of API GL-5. Designed for the lubrication of hypoid gear sets in passenger vehicles and commercial vehicles, where they offer excellent extreme pressure (EP) and antiwear properties.

Applications

Sinopec GL-5 Heavy Duty Automotive Gear Oil is suitable for use in:

- Axles, final drives and power take-off units in trucks, buses and off-highway vehicles used in various industries, including the construction, agricultural, forestry and mining sectors.
- Differentials, gear boxes and steering gears, where a hypoid oil is required.
- Some industrial gear sets, where an extreme pressure (EP) gear oil is required.

Features and benefits

- Excellent extreme pressure and antiwear performance protects gears operating at high speeds and tooth pressures from abrasion, wear and welding, even in severe high-load and shock-loading conditions, extending component life.
- Excellent thermal and oxidation stability minimise the build up of deposits and varnish, reducing wear, extending component life and ensuring longer oil life.
- Protection against corrosion and rusting extends equipment life, and reduces maintenance costs.
- Good low-temperature fluidity ensures optimum lubrication, even in cold start-up conditions, and prevents start-up wear.
- Good anti-foaming properties ensure optimum oil film thickness, protecting components against wear, and minimise oil leakage.
- Available in five viscosity grades to meet the specific needs of the application.
- Multi-grade oils can be used over a wider temperature range, and so can reduce the need for seasonal oil change thus reducing maintenance costs.
- Fully compatible with common seal materials, to extend seal life and prevent fluid leakage.

Product Data Sheet

Typical data

Sinopec GL-5 Heavy Duty Automotive Gear Oil					
SAE viscosity grade	75W/90	80W/90	85W/90	90	85W/140
Kinematic viscosity, ASTM D 445					
cSt @ 40°C	99.0	170.0	166.0	208.0	357.0
cSt @ 100°C	16.29	16.93	15.70	17.52	27.10
Viscosity index, ASTM D 2270	178	106	96	90	101
Copper corrosion, 3 hours @ 121°C, ASTM D 130	1b	1b	1b	1b	1b
Pour point, °C, ASTM D 97	-42	-30	-21	-13	-16
Flash point (COC), °C, ASTM D 92	205	208	218	228	228
Density @ 20°C, kg/l, ASTM D 4052	0.867	0.884	0.889	0.890	0.899

These data are given as an indication of typical values and not as exact specifications.

Industry and OEM specifications

Sinopec GL-5 Heavy Duty Automotive Gear Oil meets the performance requirements of the following industry specifications:	
API	GL-5,
GB ¹	13895-92
MIL	L-2105 D

¹ Note: 'GB' standards are the National Standards of the People's Republic of China.

Sinopec GL-5 Heavy Duty Automotive Gear Oil meets the performance requirements of the following OEM specifications:	
Man	342 Type M1
Sinopec GL-5 Heavy Duty Automotive Gear Oil holds the following OEM approvals:	
ZF	TE-ML 05A, TE-ML 19B, TE-ML 21A

Accuracy of information

Data provided in this PDS is typical and subject to change as a result of continuing product research and development. The information given was correct at the time of printing. The typical values given are subject to variations in the testing procedures and the manufacturing process may also result in slight variations. Sinopec guarantees that its lubricants meet any industry and OEM specifications referred to on this data sheet.

Sinopec cannot be held responsible for any deterioration in the product due to incorrect storage or handling. Information on best practice is available from your local distributor.

Product and environmental safety

This product should not cause any health problems when used in the applications suggested and when the guidance provided in the Material Safety Data Sheet (MSDS) is followed. Please consult the MSDS for more detailed advice on handling; MSDSs are available from your local distributor. Do not use the product in applications other than those suggested.

As with all products, please take care to avoid environmental contamination when disposing of this product. Used oil should be sent for reclamation/recycling or, if not possible, must be disposed of according to relevant government/authority regulations.

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