



# Thuban<sup>®</sup> GL5 EP

## Extreme Pressure Automotive Gear Oil

High performance, multipurpose, thermally stable, EP automotive gear lubricant formulated with “clean gear” technology for applications where API GL-5/MT-1 performance is required.

### APPLICATIONS

- Automotive hypoid gear differentials operating under high speed and/or low speed, high torque conditions
- Heavy-duty, non-synchronized manual transmissions and transaxles requiring this type of lubricant
- Automotive steering gears
- Top-up of limited-slip differentials after break-in of new or rebuilt units

For manual transmissions and transaxles where the manufacturer recommends API GL-4 lubricants and advises against the use of API GL-5 lubricants, Caltex Thuban GL4 is recommended.

### PERFORMANCE STANDARDS

- API GL-5, GL-4
- API MT-1
- Mack GO-J (SAE 80W-90, 85W-140)
- US Military Specifications MIL-PRF-2105E (SAE 80W-90, 85W-140) and MIL-L-2105B (SAE 80W, 90, 140)

### KEY PROPERTIES

SAE Grade	80W-90	85W-140	80W	90	140
Pour Point, °C	-30	-15	-30	-21	-15
Timken OK Load, kg	27	27	27	27	27
Viscosity, mm <sup>2</sup> /s @ 40°C	140	344	81.70	190	359
mm <sup>2</sup> /s @ 100°C	15.0	25.5	10.0	17.5	26.0
Viscosity Index	108	97	102	100	96

9912

### BENEFITS

- ★ **Reduced maintenance costs**  
Special dispersant in the “clean gear” technology additive package suspends sludges and carbonaceous deposits in the gear oil, preventing their deposition on gear components and oil seals, thus avoiding the need for premature overhaul due to deposit-induced seal wear or leakage. Outstanding thermal stability minimizes the total amount of deposits that the dispersant has to deal with.
- ★ **Extended gear equipment life**  
High performance, sulfur-phosphorus EP additive system provides excellent load carrying capacity to protect gear equipment against surface distress (i.e., spalling, pitting, scoring and wear) under heavily loaded conditions. The special inhibitor system resists corrosion of copper alloys and ferrous metals.
- ★ **Prolonged oil service life**  
Highly refined base oil and special inhibitor system provides excellent oxidation stability to resist oil degradation and thickening during long periods of severe high temperature operation.

### ENVIRONMENT, HEALTH and SAFETY

Information is available on this product in the Caltex Material Safety Data Sheet (MSDS) and Caltex Customer Safety Guide. Customers are encouraged to review this information, follow precautions and comply with laws and regulations concerning product use and disposal. To obtain a MSDS for this product, visit [www.caltexoils.com](http://www.caltexoils.com).



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## SERVICE CONSIDERATIONS

Modern automotive and heavy-duty equipment places severe demands on gear oils. Heavier loads, diverse driving conditions, terrain and more aerodynamically designed body shapes have resulted in higher operating temperatures for differentials, transmissions and steering gear units.

At elevated gear oil temperatures, it has been found that many gear oils used in manual transmission and differential applications can allow sludge and hard carbonaceous deposits to form which cause oil seal wear, leading to leakage and premature equipment failure. Consequently, more thermally stable, "clean gear" oils are required to resist oil degradation and deposit formation.

Caltex Thuban GL5 EP is a thermally stable, "clean gear" technology gear oil, incorporating additional dispersant chemistry in its additive package to suspend any sludges and carbonaceous deposits which form, and prevent their deposition on oil seals, gears and critical yellow metal components of transmissions.

API MT-1 designates the type of service that is characteristic of non-synchronized manual transmissions, as commonly used in heavy-duty equipment. Lubricants meeting the requirements of API MT-1 provide protection against the combination of thermal degradation, component wear and oil seal deterioration, which is not provided by lubricants that only meet the requirements of API GL-5.