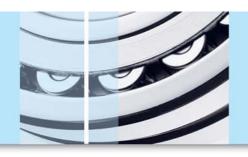
# Automotive gear lubricants in SAE 80W-90, SAE 85W-140

Product Data Sheet







## **Customer benefits**

### Caltex Gear Oil GL-4 delivers value through:

# Good gear life

Extreme pressure properties protect hypoid and other types of gears from scuffing and wear.

### Rust and corrosion protection

Effective inhibitor package protects against rusting or corrosion of gear and bearing surfaces.

### Market general performance

Acceptable thermal and oxidation stability allows for appropriate gear protection in non-critical operations

### Good lubricant life

Outstanding thermal and oxidation stability allow high temperature operation with long lubricant life.

#### **Seal Protection**

Formulated to protect against oil seal deterioration.

# **Applications**

Gear Oil GL-4 are designed for use in automotive transmissions, transaxles, steering systems and hypoid drive axles which require a fluid with API GL-4 performance (equivalent to US Military specification MIL-L-2105).

The friction characteristics of the Gear Oil GL-4 product range make them suitable for use in many synchronized manual transmissions.

Some modern transmissions may require a specific fluid type - refer to the manufacturers' literature for further details.

### **Performance**

# Caltex gear Oil GL-4 meet the requirements of:

• API Service Categories GL-4

# **Product features:**

- Caltex Gear Oil GL-4 are formulated using paraffinic base stocks and contain a carefully balanced sulfurphosphorus extreme pressure additive package to provide gear protection, good rust and corrosion protection and long lubricant life.
- Caltex Gear Oil GL-4
  gear lubricants are
  recommended for use in
  automotive spiral
  bevel and hypoid
  differentials, power
  dividers, oil-lubricated
  steering axle wheel
  bearings and transaxles/
  transmissions where API
  GL-4 Oils are recommended.









continued

# Typical test data

GEAR OIL GL-4	TEST METHOD	RESULTS	
SAE Grade	ASTM	80W-90	85W-140
<b>Product Number</b>		516296	516297
Density @ 15°C kg/L	D4052	0.8915	0.909
Kinematic Viscosity,			
cSt @ 40°C	D445	132	360
cSt @ 100°C	D445	14.0	25.9
Viscosity, Brookfield			
cP @ -12°C	D2983	_	70000
cP @ -26°C	D2983	93,700	-
Viscosity Index	D2270	105	100
Flash Point, °C	D92	218	214
Pour Point, °C	D97	-35	-18

This bulletin was prepared in good faith from the best information available at the time of issue. While the values and characteristics are considered representative, some variation, not affecting performance, can be expected. It is the responsibility of the user to ensure that the products are used in the applications for which they are intended.

Produced by Chevron Global Lubricants: Africa, Middle East and Pakistan









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### Service considerations

API GL-4 oils are designed for manual transmissions with light to heavy load and sliding forces, such as unsynchronized Transmission, certain synchromesh transmissions in on-road and off-road trucks. They provide more extreme pressure wear protection than API GL-3 oils, which are intended for mild service conditions.

However, API GL-4 oils are not suitable for many manual transmissions with synchronizers, especially those made of softer yellow metals such as brass. This is because API GL-4 oils contain sulfur/phosphorus additives that can chemically attack and corrode the synchronizers, leading to premature wear and failure. Also synchronisers of different materials require certain friction characteristics for efficient functioning of the synchronizer enabling smooth shifting. Therefore, API GL-4 oils cannot be used in manual transmissions with synchronizers unless specified by the OEM.

Consider using dedicated manual Transmission fluids like Havoline Fully Synthetic Manual Transmission Fluid or Delo Syn-Trans or Delo Syn-AMT or Delo Syn-MTF range of products based on the manufacturer's recommendation.

Environment, Health and Safety Information is available on this product in the Material Safety Data Sheet (MSDS) and 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.