

ESSO GEAR OIL GX EXTRA

AUTOMOTIVE GEAR OILS

April 2009



Esso Gear Oil GX Extra is an API GL-6 quality oil specifically designed for severe service with shock loading

- ◆ **Esso Gear Oil GX Extra is a premium multi-service, extreme pressure, sulphur-phosphorus type gear oil recommended for the high performance requirements of API service classification GL-5 and GL-6.**
- ◆ **A synthetic blended product available in 75W-90, and 80W-140 grades**

Primary Applications

Esso Gear Oil GX Extra is a multi-service, non-corrosive type hypoid gear lubricant recommended for API service GL-5 and the more severe API service GL-6 (now obsolete). GL-6 is defined by the American Petroleum Institute as designating those lubricants suitable for the lubrication of gears, particularly hypoid gears, in passenger cars, trucks and other equipment operating under high speed, severe shock loaded; high speed, low torque; and low speed, high torque conditions.

Esso Gear Oil GX Extra is recommended for most manual transmissions, reducers, differentials, and final drives used in passenger cars, trucks, construction and mining equipment, farm tractors and industrial equipment requiring API GL-5 or GL-6 performance levels.

Esso Gear Oil GX Extra 75W-90 is suitable as an all-season lubricant for manual transmissions and differentials in most passenger car and light duty vehicles - including Ford high off-set hypoid gears. The exceptions include those differentials which require limited slip performance for which Esso Gear Oil LS 80W-90 is recommended and manual transmissions and transaxles for which specific OEM or API service GL-4 lubricants are specified.

Esso Gear Oil GX Extra is recommended for most equipment in severe service, particularly in the differentials and planetary gears in mining and woodland trucks, where maximum protection is required.

Esso Gear Oil GX Extra is recommended for Mack GO-F specification. For Mack Trucks specifying GO-H or GO-J oils, use Esso Gear Oil GX 80W-90 or 85W-140. Esso Gear Oil GX Extra is also suitable for worm gear drives and axles.

Performance Features

Anti-Score Protection

Esso Gear Oil GX Extra meets API service level GL-6 score levels. This provides excellent gear tooth wear protection in high off-set hypoid and shock loaded conditions.

Multi-Temperature Service

Esso Gear Oil GX Extra 80W-140 offers both good low temperature performance and protection at high operating temperatures. For extreme low temperature operating conditions, Esso Gear Oil GX Extra 75W-90 is recommended. This high quality synthetic blend offers improved low temperature flow characteristics without sacrificing performance at high operating temperatures.

Under low temperature start-up conditions, the channel point and viscosity are important, since lubricants should flow readily between contacting surfaces. The temperature at which the lubricant reaches a viscosity of 1500 Poise is used to define low temperature properties, and is

based on a series of tests in a specific rear axle design. These tests have shown that pinion bearing failure has occurred at Brookfield viscosity higher than 1500 Poise. Other axle designs may tolerate higher viscosities, and the typical properties of Esso Gear Oil GX Extra should be used only as a guide.

Corrosion Protection, Filterability, Foam Protection, Seal Compatibility, Oil Compatibility and Storage Stability properties are similar to those of Esso Gear Oil GX.

Precautions

Esso Gear Oil GX Extra is manufactured from quality petroleum base stocks, blended with selected additives. As with all petroleum products, good personal hygiene and careful handling should always be practiced. Avoid prolonged contact with the skin, splashing into the eyes, ingestion, or vapour inhalation. Please refer to the Esso Material Safety Data Sheet for further information.

Note: This product is NOT controlled under the Canadian WHMIS legislation.

Typical Properties

Esso Gear Oil GX Extra	75W-90	80W-140
Density @ 15 °C	903	894
Flash, COC, °C	150	160
Kinematic Viscosity		
cSt @ 40 °C	93	268
cSt @ 100 °C	15.9	27.4
Viscosity Index	182	134
Brookfield Viscosity, cP		
@ -40°C	90,000	
@ -26°C		130,000
Pour Point, °C	-48	-33
Channel Point, °C	<-45	<-36
Colour	1.0	1.0

The values shown above are representative of current production. Some are controlled by manufacturing and performance specifications while others are not. All may vary within modest ranges.