



# L S ENERGY SAVER GEAR OIL

- **QUALITY BASE OILS**
- **QUALITY ADDITIVES**
- **LIMITED SLIP PERFORMANCE**
- **COOLER AXLE RUNNING TEMPERATURES**
- **IMPROVED FUEL ECONOMY**
- **WIDE VARIETY OF USES**

Texas Refinery Corp's L S ENERGY SAVER GEAR OIL is a multi-purpose gear lubricant designed for today's advanced equipment. Field testing of L S ENERGY SAVER GEAR OIL has shown excellent performance.

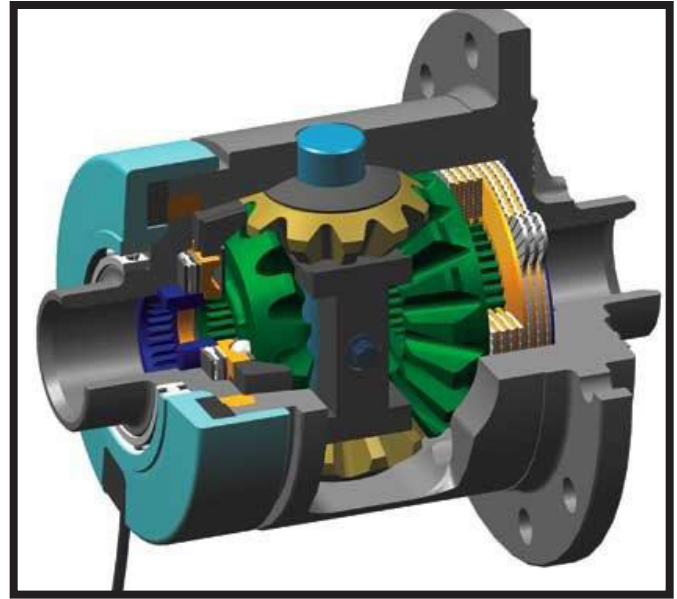
## **L S ENERGY SAVER GEAR OIL Begins And Ends With Quality**

L S ENERGY SAVER GEAR OIL is formulated with paraffin base oils having a 95 VI or better. The base oils have been put through several refining steps to remove undesirable characteristics as well as to improve the oil's oxidation resistance and improve the oil's response to additives. The base oils will not contribute to the formation of sludge, varnish, and other undesirable by-products as seen in so many gear lubricants.

## **L S ENERGY SAVER GEAR OIL Quality Additives**

L S ENERGY SAVER GEAR OIL has incorporated in it a proven extreme pressure gear additive package and a friction modifier system. L S ENERGY SAVER GEAR OIL is formulated to offer enhanced lubricity and limited slip performance. In fact the L S in the name of the product stands for "Limited Slip."

L S ENERGY SAVER GEAR OIL is red colored but is not to be confused with automatic transmission fluids like DEXRON® VI (GM)/



*Limited Slip differentials need the special chemistry contained in LS ENERGY SAVER GEAR OILS.*

MERCON® V (Ford). It is NOT for use in automatic transmissions or torque converters.

## **L S ENERGY SAVER GEAR OIL Limited Slip Performance**

The additive system has gone through considerable testing. For example the General Motors Limited Slip Axle Test uses different sized rear tires to obtain a 10-15 difference in wheel revolution per mile. The Volvo Anti-spin Axle test is similar to the General Motors Test in that it uses two different sized rear wheels. This test is geared up to have 50-55 differences in wheel revolution per mile. The L-37 test has the gear oil placed in a differential and subjected to conditions of high-speed, low torque and to low-speed, high torque operations. The L-42 test covers a procedure where the gear oil is placed in a differential and subjected to conditions of high speed and shock loading.

## **L S ENERGY SAVER GEAR OIL Cooler Axle Running Temperatures**

In testing the additive system in the modified Mack Power Divider Snap Test, temperatures were taken in the rear axles. Conventional GO-G gear additive systems were used for comparison. In this comparison the L S ENERGY SAVER GEAR OIL additive system showed 7°F to 11°F cooler operating temperatures indicating less friction. The cooler operation temperatures also

mean the life of the oil will be longer. Each 18°F drop in temperature will double the life of the gear oil.

## L S ENERGY SAVER GEAR OIL Improved Fuel Economy

In order to see if L S ENERGY SAVER GEAR OIL would give any fuel economy, a steady state test was run using a loaded pick-up on a Chassis Dynamometer using the additive package. This was done to control the many variables that generate when trying to run economy testing. In this test, L S ENERGY SAVER GEAR OIL showed between a 0.9% and 2.8% benefit in fuel savings when compared to a standard 80W/90 factory fill gear oil.

## L S ENERGY SAVER GEAR OIL

### Wide Variety of Uses

L S ENERGY SAVER GEAR OIL not only is capable of handling Limited Slip differentials in some automobiles and light trucks, but it also can be used in the differentials of heavy mobile equipment such as trucks, buses, and various on-highway vehicles. It also gives outstanding performance in off-road heavy equipment such as farm, construction, and mining equipment where extreme pressure gear lubricants are needed. In addition to mobile equipment, both on the highway and off-road, the product is capable of handling a wide variety of industrial uses and enclosed gear cases. These applications may include but not necessarily be limited to, the following: Power Dividers, Auxiliary Units, Gear Heads, Speed Reducers and Gear Boxes.

# SPECIFICATIONS

## L S ENERGY SAVER GEAR OIL

Meets or exceeds the following specifications: MIL-L-2105B, MIL-L-2105C, MIL-L-2105D, MIL-PRF-2105E, API GL-4, API GL-5, API MT-1, Mack GO-G, Mack GO-H, Mack GO-J, Limited Slip, Volve Anti-Spin Tests, Clark MS-8, Ford M2C105A, Ford M2C108C, GM Spec 9985044, GM Spec 9985182, Chrysler MS 3636, Chrysler MS 3725, John Deere J 11 D, IHC B22, Rockwell 0-76.

SAE ISO	80W/90 220	85W/140 460
Product Code	#8100	#8102
API Gravity °F	25/27	24/26
Flash, °F COC	400	400
Fire Point, °F	440	440
Pour Point, °F	-20	+10
Channel Point, °F	-30	0
Brookfield Viscosity at -26°C, cp	---	---
Viscosity, SUS at 100°F	1100	2090
Viscosity, SUS at 210°F	85/95	130/145
Viscosity Index	95	95
Three Hour Copper Strip Corrosion	Pass	Pass
Foam Test:		
Sequence I	20/0	20/0
Sequence II	20/0	20/0
Sequence III	20/0	20/0
Sulfur, Wt. %	1.9	1.9
Phosphorous, Wt. %	0.14	0.14
Color	RED	RED
Timken OK Load, Lbs.		
Min.	45	45
Typical	50	50

Handling Information: For safe handling of the product, read the Safety Data Sheet (SDS).

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