## "PERFORMANCE UNDER PRESSURE"



# GEAR OIL 75W90HD & 75W140HD 100% SYNTHETIC BASE HEAVY DUTY

## PRODUCT DATA SHEET

- Reduces friction
- Runs cooler
- Increases fuel mileage
- · Superior film strength
- Extends gear life
- Eases cold temperature shifting
- Extended service life

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## **Product Description:**

NEO synthetic Gear Oils are designed to take 40% more load carrying capabilities than its competitors. NEO Gear Oils are compounded with the most recently developed additive system to provide the ultimate in gear protection, from an E>P> wear, corrosive wear, and shock load wear standpoint. A friction modifier is also employed to reduce sliding friction resulting in lower energy requirements, thus less drag, lower fuel consumption, and more horsepower.

## **Technical Description:**

The single molecular structure of the NEO synthetic provides better and more consistent lubricating properties than petroleum. This reduces friction, which reduces gear wear. Reduced friction also means fuel mileage can be expected to increase.

NEO synthetic is designed to withstand higher temperature, and will allow gear shifting at a much lower temperature than petroleum lubricants. In addition, it has inherently higher film strength than petroleum lubricants, thereby providing added protection to the bearings & gears.

 Reduced Friction: NEO synthetic gear oil has an extremely low coefficient of friction, which means cooler running gear boxes. The reduced friction a& cooler running combine to extend gear box life, and also the life of the lubricant.

- High Load Capacity: The high film shear strength allows the gear lube to perform far beyond the capabilities of petroleum products in hypoid differentials and other gear boxes. An antifoaming additive assures that the film strength will not be compromised.
- Easier Cold Weather Shifting: The lower pour point temperature of the synthetic means better operation at lower temperatures, and better protection for gears & bearings upon initial startup at the lower temperature.
- Corrosion Resistance: The synthetic base stock does not break down into unwanted components and form corrosive compounds under the stress of high heat. The additive package works synergistically with the synthetic base to provide further corrosion protection.
- Seal Compatibility; The NEO synthetic base stock increases seal life. It will not cause excessive seal swelling, nor will it cause seals to shrink or harden.

# **Applications:**

NEO Gear Oil exceeds the requirements of auto specs GL-2 thru GL-5 and military specification MIL-L-2105E. It is ideally suited for autos and trucks requiring this viscosity grade to these specifications.

NEO meets the requirements for GL-4 grade even where manufacturers discourage the use of a GL-5 product. It is recommended for front wheel drive transaxle use where GL-4 performance is specified.

Common vehicle drive train components needing the NEO Gear Oils are manual transmissions, drive axles, differentials (including limited slip differentials), transaxles, auxiliary transmissions, transfer cases, overdrives & final drives.

Industrial equipment applications for NEO Gear Oils include gear boxes for conveyors & similar assembly line drives.

Gear boxes using this type of lubricant typically do not need any break-in period on petroleum lubricants. The NEO Gear Oil can be used as a direct replacement at anytime.

NEO Gear Oil will mix with petroleum products; it is not necessary to flush the gear box first. However, mixing a large amount of petroleum with NEO synthetic will reduce the qualities of the NEO and will shorten the service life. This is not recommended. Using aftermarket additives is not necessary and may product unpredictable results. Use of aftermarket additives voids the NEO warranty.

#### **SPECIFICATIONS: \***

NEO Gear Oils meet & exceeds requirements for Auto Spec GL-2 through GL-5 and meets military specifications MIL-L-2105E.

Caution: Use the viscosity grade recommended by the manufacturer for the expected environment.

<u>Specification</u>		<u>75w90HD</u>	<u>75w140HD</u>
Viscosity Index Viscosity:		165	175
Kinematic Flash Point Pour Point	@ 212°F	17.5cSt 405°F -50°F	25.3cSt 221°F -50°F

Subject to Normal manufacturing tolerances.

# GEAR OIL 75W90RHD 100% SYNTHETIC BASE RACING HEAVY DUTY

## PRODUCT DATA SHEET

#### **Product Description**

NEO 75w91RHD synthetic gear oil is designed to take 80% more load carrying capabilities than its competitors. NEO 75w91RHD is compounded with the most recently developed additive system to provide the ultimate in gear protection, from an E.P. wear, corrosive wear, and shock load wear standpoint. A friction modifier is also employed to reduce sliding friction resulting in lower energy requirements, thus less drag, lower fuel consumption, and more horsepower.

NEO synthetic gear oils offer both cold temperature advantages (Pour Point is -45°F) and high temperature stability (Flash Point is 480°F). As a multigrade product meeting the low temperature viscosity requirements of an SAE 75 W grade gear oil, but also meeting the viscosity requirement of SAE 90 grade at operating temperatures. The base is a unique combination of synthetic components that permits meeting SAE 75w90 viscosity requirements without the need for a viscosity improver.

# **Extended Lubricant Utility**

NEO 75w90RHD gear oil spans a wide range of viscosity classifications making it the first truly dependable "All Seasons" gear oil. This means it will flow and properly lubricate at the lowest winter temperature while providing the film strength for heavy duty operations during boiling hot summer driving conditions. The

advantages of such an oil have long been recognized as evidenced by the universal acceptance of multiviscosity motor oils. Many lubricant manufacturers have previously offered multigraded gear oils. These oils have been formulated with the conventional viscosity index improvers used to product multi-vis oils. But these additives, which work so well in motor oils, will not Withstand the extreme pressures and shearing forces encountered in normal gear operation. Consequently, the advantages of multi-grading are lost after only a few thousand miles of service.

The new additive system used in NEO 75w90RHD is almost totally resistant to these forces. NEO 75w90RHD shows virtually no change in grade even after 50,000 miles of more of operation in heavily loaded, hypoid axle drives. This means that in addition to the fuel savings generated, NEO will provide true year round performance in all climates from arctic cold to desert heat. Additionally, it will provide superior all around performance in virtually all applications calling for gear oil rated from GL-2 through GL-6, in any viscosity grade from 75w, 80w90, or 90w. This can result in reduced gear oil inventories allowing a single lubricant to replace as many as 4 or 5 separate oils.

## **Applications:**

NEO 75w90RHD gear oil is recommended for automotive type gear service in manual transmissions, differentials, transfer cases, over-drive units, oil lubricated wheel bearing, oil lubricated universal joints, steering gear boxes, or any other gear unit calling for a high quality heavy duty 75w90 hypoid type gear oil. NEO 75w90RHD also is recommended for use in all limited slip type differential designs. NEO 75w90RHD meets or exceeds performance requirements of Military Specification Mil-L-2105B, Mil-L2105-C, and API Specification GL-5, GL-6, and SAE Classification J306a.

# Specifications:\*

Specific gravity 15.6°C (60°F) 0.87 Flash, °C 246 (475°F) Viscosity @ 100°C cST (SUS) 15.4 Brookfield vis., -40°C 48.500 Pour Point -45 Viscosity Index 180 7-Day Moisture Corrosion (L-33) **PASS** API GL-5 Test Sequence **PASS** Mil-L-2105 C Test Sequence PASS

NEO Synthetic Gear Lubricant is race-proven too – not only at Indy but at endurance competitions all over the world. The fact is no conventional gear lube can perform as well as NEO's Synthetic.

<sup>&#</sup>x27;\*Subject to normal manufacturing tolerances