# **Tech Data**

# **LUBRICANTS**

# TRAXON™ SYNTHETIC 75W-90 GEAR OIL

# Introduction

Petro-Canada's TRAXON Synthetic 75W-90 is a premium multi-grade gear oil formulated to provide excellent long-lasting wear protection to extend equipment life and reduce downtime and maintenance costs. TRAXON Synthetic provides excellent year-round performance, and is particularly suited for extreme cold temperatures. for excellent lubrication of gear drives found in manual transmissions and rear axles.

TRAXON Synthetic starts with the HT Purity Process to produce a 99.9% pure, crystal clear base oil. By removing the impurities that can hinder the performance of competitive conventional oils, and blending in specialty additives, TRAXON Synthetic gear oil delivers maximum performance.

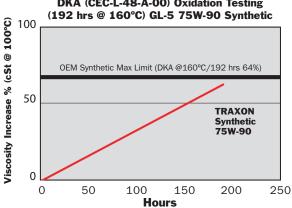
# **Features and Benefits**

## **Excellent Wear Protection**

- Outstanding shear stability and anti-wear EP additives protect equipment being driven longer, harder and faster in tougher conditions for extended equipment life and reduced maintenance costs
  - Shear stability ensures retention of viscosity which protects equipment components against metal-to-metal contact and wear, especially at high temperatures

# **Longer Life**

**Meets European and major North American OEM's full synthetic requirements as** measured by the DKA Oxidation test. The better an oil can maintain its viscosity and resist degradation, the longer it will last. This translates into helping to reduce maintenance costs and increase uptime



DKA (CEC-L-48-A-00) Oxidation Testing

In the DKA oxidation test, product performance is measured by how much harmful viscosity increase will occur over time. TRAXON Synthetic meets the OEM full synthetic requirements by remaining below the maximum limit for the entire duration of the test.

- Extends intervals between changeouts up to 400,000 km (250,000 miles)\* for maximized oil life
- Minimizes sludge, varnish or hard carbon deposits for better protection against wear

#### What is the HT difference?

Petro-Canada Lubricants starts with the HT purity process to produce water-white, 99.9% pure base oils. The result is a range of lubricants. specialty fluids and greases that deliver maximum performance for our customers.

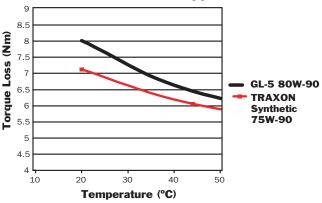


<sup>\*</sup>Based on highway, normal operation which must be reduced for severe service, vocational and/or off-road type applications.

# **Improved Efficiency**

- FZG Efficiency Test demonstrates that TRAXON Synthetic provides better torque efficiency vs. 80W-90 GL-5 oils (from 20°C to 45°C at Moderate Loads)
  - Better torque efficiency reduces friction and lubricant drag for smoother and more efficient operating performance which may lead to lower fuel consumption

# FZG Rig Results of Test Oils Losses at 302 Nm Applied Load

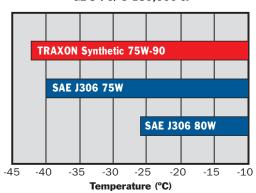


In the FZG Efficiency Testing, the lower the torque losses the better the efficiency of the gear. TRAXON Synthetic 75W-90 is better than a GL-5 80W-90 oil under no loads, 135 Nm load, and 302 Nm load [20°C (60°F) to 45°C (113°F)].

### **Low Temperature Protection**

- Exceptional temperature protection for extreme cold weather conditions
  - · Even easier start-ups and cold weather shifting
  - Better gear protection at extreme cold temperatures

TRAXON (Low Temperature Performance) GL-5 (°C) @ 150,000 cP



TRAXON Synthetic 75W-90 protects equipment better in extreme cold temperatures than regular 80W oils and exceeds the 75W specification.

# **Industry & OEM Approvals**

TRAXON Synthetic is approved against the SAE J2360 Global Standard (formerly MIL-PRF-2105E). This means customers around the world can be assured of a measurable and recognized quality of performance for their lubricants.

TRAXON Synthetic 75W-90 is designed to meet API Gear Lubricant Service GL-5 and API MT-1 Gear Lubricant standard for heavy duty manual transmissions.

TRAXON Synthetic 75W-90 is approved by Mack where a GO-J gear oil is specified and listed by ZF as TE-ML lubricant class 05A, 16B, 17B and 21A approved (ZF002212) and Scania STO 1:0 approved for axles and manual transmissions. TRAXON Synthetic 75W-90 also meets the Meritor 0-76-E specification.

# **Applications**

Petro-Canada TRAXON Synthetic is recommended for year-round use and for extreme cold temperature conditions in many manual transmissions, differentials, power take off units and final drives found on passenger cars, trucks, and off-highway vehicles used in construction, farm, forestry and mining operations. Consult owners manual for type and grade needed.

TRAXON Synthetic is recommended for most oil lubricated universal joints, wheel bearings, planetary gear sets, steering gears and certain industrial gear reducers requiring API GL-3, GL-4, or GL-5 oils.

Due to specific lubrication requirements TRAXON Synthetic must not be used in:

- · Automatic Transmissions
- · Powershift Transmissions
- Hydrostatic drives and systems that include the lubrication of wet clutches and brakes
- Manual Transaxles on front wheel drive vehicles where an automatic transmission fluid or engine oil is specified
- Spicer Manual Transmissions where single grade engine oils are specified
- Not for use in specific manual transmissions where you must use an API GL-4 rated oil <u>only</u> and a GL-5/MT-1 oil is not acceptable

# **Typical Performance Data**

PROPERTY	TEST METHOD	TRAXON SYNTHETIC 75W-90
Density, kg/L, 15°C (60°F)	ASTM D4052	0.858
Flash Point, COC, °C (°F)	ASTM D92	202 (396)
Kinematic Viscosity, cSt @ 40°C (SUS @ 100°F) cSt @ 100°C (SUS @ 210°F)	ASTM D445	96.7 (492) 15.5 (81)
Brookfield Viscosity, cP @ -40°C (-40°F)	ASTM D2983	89700
*Temperature for 150,000 cP, °C (°F)	ASTM D2983	-42.5 (-44.5)
Viscosity Index	ASTM D2270	171
Pour Point, °C (°F)	ASTM D5950	-48 (-53)
Foaming Sequence 1 Sequence 2 Sequence 3	ASTM D892	0/0 10/0 0/0
Phosphorus, % wt	ASTM D4951	0.1250
Sulphur, % wt	ASTM D4294	2.0

The values quoted above are typical of normal production. They do not constitute a specification.

<sup>\*</sup> The figure of 150,000 cP maximum Brookfield viscosity is issued in MIL-PRF-2105E and SAE J2360 to define low temperature properties. This value was selected as the result of a series of tests in a specific rear axle design which showed that pinion bearing failure can occur at viscosities higher than 150,000 cP. This technique defines the minimum temperature at which each viscosity grade can be safely used.

To order product or to learn more about how Petro-Canada Lubricants can help your business visit: **lubricants.petro-canada.com** or contact us at: **lubecsr@petrocanadalsp.com** 

ISO 9001 ISO 14001 ISO/TS 16949

