# **Tech Data**

# TRAXON<sup>™</sup> XL Synthetic Blend 75W-90 Gear Oil

# Introduction

Petro-Canada's TRAXON XL Synthetic Blend 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 XL Synthetic Blend provides excellent year-round performance for superior lubrication of gear drives found in manual transmissions and rear axles.

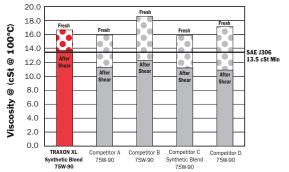
TRAXON XL Synthetic Blend starts with the HT Purity Process to produce a 99.9% pure, crystal clear base oil. By removing the impurities that can hinder the performance of competitive conventional oils, and blending in specialty additives, TRAXON XL Synthetic Blend gear oil delivers maximum performance.

# **Features and Benefits**

#### **Excellent Wear Protection**

- As a result of its anti-wear EP additives, TRAXON XL Synthetic Blend provides excellent wear protection as proven by its performance in the stringent L-37 wear test. In addition, it has excellent shear stability as proven by a severe shear test to 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 higher temperatures
  - Provides superior protection as proven against the five wear parameters of the L-37 test

<sup>75</sup>W-90 SAE J306, Gear Oils / Fresh and after KRL Viscosities @ 100°C



The KRL Shear test measures the effects of shearing on gear oil. In order to provide an effective barrier of protection for equipment the after shear viscosity must be a minimum of 13.5 cSt (for an SAE 90 weight oil). TRAXON XL Synthetic Blend exceeds the minimum SAE standards while the competition shears out of grade.

L-37 Wear Parameters (Pinion Side)	Meets Spec	Exceeds Spec
Wear		~
Scoring	<b>v</b>	
Rippling	<ul> <li>✓</li> </ul>	
Ridging		~
Pitting/Spalling		~

L-37 Wear Parameters (Ring Side)	Meets Spec	Exceeds Spec
Wear		~
Scoring	~	
Rippling		V
Ridging		~
Pitting/Spalling		~

The L-37 (ASTM D6121) test is used by individual OEMs and US and Canada Military and Federal Governments, to measure five parameters that are the result of distress on gears. TRAXON XL Synthetic Blend 75W-90 meets or exceeds specs on each wear parameter.

# What is the HT difference?

**LUBRICANTS** 

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.

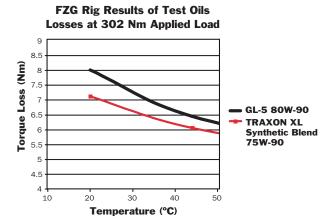


#### **Longer Life**

- Superior oxidation stability provides reduced maintenance costs and increased uptime
  - Extends intervals between changeouts up to 400,000 kms (250,000 miles)\* for maximized oil life
  - Minimizes sludge, varnish or hard carbon deposits for better protection against wear

#### **Improved Efficiency**

- FZG Efficiency Test demonstrates that TRAXON XL Synthetic Blend provides better torque efficiency vs. GL-5 80W-90s (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

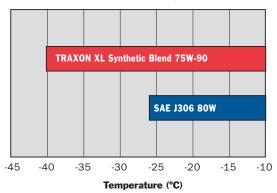


In the FZG Efficiency Testing, the lower the torque losses the better the efficiency of the gear. TRAXON XL Synthetic Blend 75W-90 is better than a GL-5 80W-90 oil under no loads, 135 Nm load, and 302 Nm load [ $20^{\circ}C$  ( $60^{\circ}F$ ) to  $45^{\circ}C$  ( $113^{\circ}F$ )].

#### Low temperature protection

- Excellent temperature protection for cold weather conditions
  - · Easier start-ups and cold weather shifting
  - · Better gear protection at colder temperatures

TRAXON (Low Temperature Performance) SAE J306 (°C) @ 150,000 cP



TRAXON XL Synthetic Blend 75W-90 protects equipment better in colder temperatures than 80W grades.

### **Industry & OEM Approvals**

TRAXON XL Synthetic Blend 75W-90 is approved against the SAE J2360 Global Standard (formerly US MIL-PRF-2105E) (PRI GL 0796 and 0951). This means customers around the world can be assured of a measurable and recognized quality of performance for their lubricants.

TRAXON XL Synthetic Blend 75W-90 meets API Gear Lubricant Service GL-5 and API MT-1 Gear Lubricant standard for heavy duty manual transmissions.

TRAXON XL Synthetic Blend 75W-90 is approved by Mack where a GO-J gear oil is specified. It also meets the Meritor 0-76-E specification and meets Scania STO 1:0 requirements for axles and manual transmissions.

### **Applications**

Petro-Canada TRAXON XL Synthetic Blend is recommended for year-round use 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 XL Synthetic Blend is recommended for most oil lubricated universal joints, wheel bearings, planetary gear sets, steering gears and certain industrial gear reducers requiring GL-3, GL-4, or GL-5 oils.

Due to specific lubrication requirements TRAXON XL Synthetic Blend 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 XL SYNTHETIC BLEND 75W-90
Density, kg/L, 15°C (60°F)	ASTM D4052	0.8697
Flash Point, COC, °C (°F)	ASTM D92	171 (351)
Kinematic Viscosity, cSt @ 40°C (SUS @ 100°F) cSt @ 100°C (SUS @ 210°F)	ASTM D445	103.3 (525) 16.7 (86)
Brookfield Viscosity, cP @ -40°C (-40°F)	ASTM D2983	124,800
*Temperature for 150,000 cP, °C (°F)	ASTM D2983	-40 (-40)
Viscosity Index	ASTM D2270	170
Pour Point, °C (°F)	ASTM D5950	-45 (-51)
Copper Corrosion, 3 h @ 121°C / 250°F	ASTM D130M	1b
Foaming Sequence 1 Sequence 2 Sequence 3	ASTM D892	5/0 20/0 5/0
Phosphorus, % wt	ASTM D4951	0.122
Boron, % wt	ASTM D4951	0.029

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

\* 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** 



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Beyond today's standards."