



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 superior 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 gear oil delivers maximum performance.

Features and Benefits

Excellent wear protection

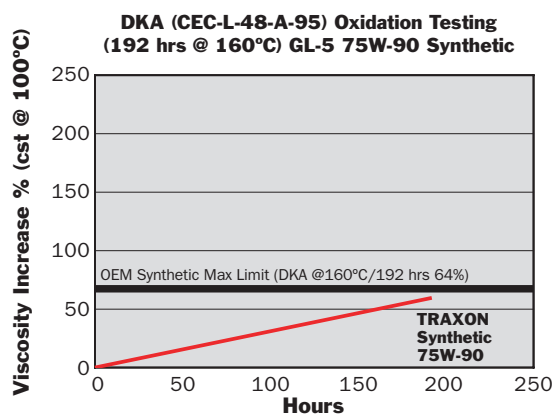
- As a result of its anti-wear EP additives, TRAXON Synthetic provides excellent wear protection as proven by its performance on the stringent L-37 wear test. In addition, it has excellent shear stability as proven by a severe shear test to protect equipment being driven longer, harder and faster in 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 in high temperatures
- Provides superior protection as proven against the five wear parameters of the L-37 test

L-37 Wear Parameters (Pinion Side)	Meets Spec	Exceeds Spec
Wear		3
Scoring	3	
Rippling		3
Ridging	3	
Pitting/Spalling		3

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

Longer Life

- Meets a 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. Ultimately this translates into helping to reduce maintenance costs and increase uptime.



In the DKA oxidation test, product performance is measured by how much harmful viscosity increase will occur over time (therefore, the product line should not cross over the maximum limit). TRAXON Synthetic meets the OEM full synthetic requirements.

What is the HT difference?

Petro-Canada 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.

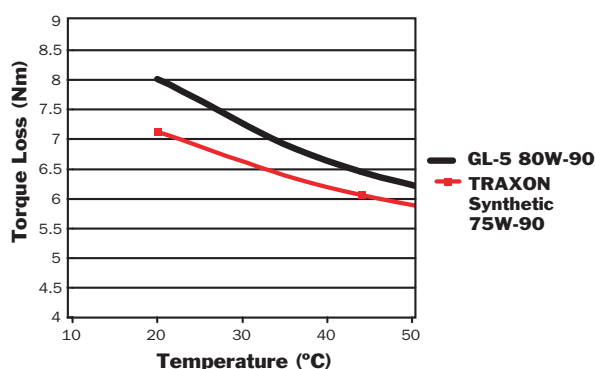


- Recommend extending intervals between changeouts up to 400,000 km (250,000 miles) for maximized oil life
- Minimizes sludge, varnish or hard carbon deposits for better protection against wear

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

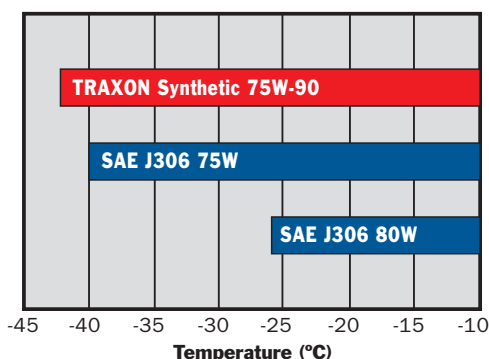


In the FZG Efficiency Testing, the lower the torque losses the better the efficiency of the gear. TRAXON Synthetic 75W-90 is better than a GL-5 80W-90 oil under no loads, 135 Nm load, and 302 Nm load [20°C (60°F) to 45°C (113°F)].

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 your equipment better in extreme cold temperatures than regular 80W oils and exceeds the 75W specification.

Industry & OEM Specifications

TRAXON Synthetic is designed to exceed the SAE J2360 Global Standard which means customers around the world can be assured of a measurable and recognized quality of performance for their lubricants.

TRAXON Synthetic 75W-90 is formulated to meet Dana, Meritor, ZF, Navistar, and Eaton's stringent GL-5/MIL-PRF-2105E gear oil specifications (see specific OEM requirements for further details). TRAXON Synthetic 75W-90 is recommended in Mack Truck differentials where a Mack GO-J oil or MIL-PRF-2105E gear oil is specified.

Applications

Petro-Canada TRAXON Synthetic is recommended for year-round use and for extreme cold temperature conditions in most 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 exceeds API Gear Lubricant Service GL-5 and meets API MT-1 Gear Lubricant standard for heavy duty manual transmissions. TRAXON Synthetic 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. TRAXON Synthetic is completely compatible with conventional gear 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

Typical Performance Data

PROPERTY	TEST METHOD	TRAXON SYNTHETIC 75W-90
Density, kg/L, 15°C (60°F)	ASTM D4052	0.8639
Flash Point, °C (°F)	ASTM D92	173 (345)
Kinematic Viscosity, cSt @ 40°C (SUS @ 100°F) cSt @ 100°C (SUS @ 210°F)	ASTM D445	99.6 (462) 16.46 (84)
Brookfield Viscosity, cp @ -40°C (-40°F)	ASTM D2983	67,200
*Temperature for 150,000 cP, °C (°F)	ASTM D2983	-42.2 (-46.7)
Viscosity Index	ASTM D2270	179
Pour Point, °C (°F)	ASTM D5950	-51 (-60)
Channel Point, °C (°F)	3GP-029.1b	<-60 (<-76)
Foaming Sequence 1	ASTM D892	0/0
Sequence 2		10/0
Sequence 3		10/0
Phosphorus, % wt	PCM 438	0.114
Sulphur, % wt	PCM 438	1.79

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.

Health and Safety

Petro-Canada TRAXON Synthetic has no adverse effect on health provided it is used as directed. To obtain Material Health and Safety Data Sheets (MSDS), contact one of our TechData Info Lines.

TechData Info Lines

To place an order, please call a Customer Order Management Representative at :

Canada (English) Phone 1-800-268-5850
(French) Phone 1-800-576-1686
United States Phone 1-877-730-2369
Latin America Phone +1-416-730-2369
Europe Phone +1-416-730-2389
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You can also e-mail us at lubecsr@suncor.com



To learn more about how Petro-Canada lubricants, specialty fluids, oils and greases can help maximize your equipment performance, savings and productivity, please contact us at :

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