

Tech Data



TRAXON™ 80W-90 GEAR OIL

Introduction

Petro-Canada's TRAXON 80W-90 is a multi-grade gear oil formulated to provide excellent long-lasting wear protection to extend equipment life and reduce downtime and maintenance costs.

TRAXON 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 provides excellent wear protection as proven by its performance in the stringent L-37 wear test. In addition, it has outstanding 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 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		✓
Scoring	✓	
Rippling	✓	
Ridging	✓	
Pitting/Spalling		✓

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

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 80W-90 meets or exceeds specs on each wear parameter, thereby passing this stringent wear test.

Longer Life

- **Performs better than competitive API GL-5 80W-90 gear oils as measured by the DKA Oxidation test. The better an oil can maintain its viscosity and resist degradation and sludging, the longer it will last and the better protection it will give. This translates into helping to reduce maintenance costs and increase uptime**
- 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.



*based on highway, normal operation which must be reduced for severe service, vocational and/or off-road type applications.

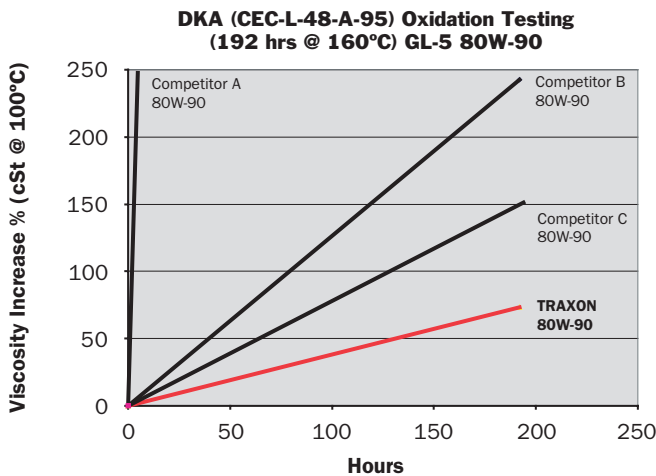
In the DKA oxidation test, product performance is measured by how much harmful viscosity increase will occur over time (therefore, the flatter the line the better). Compared to these competitors, Petro-Canada's TRAXON 80W-90 with its advanced formulation is clearly superior.

Industry & OEM Approvals

TRAXON 80W-90 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 80W-90 meets API Gear Lubricant Service GL-5 and API MT-1 Gear Lubricant standard for heavy duty manual transmissions.

TRAXON 80W-90 is approved by Mack where a GO-J gear oil is specified and listed by ZF as TE-ML lubricant class 05A, 12M, 16B, 17B, 19B and 21A approved (ZF000764). TRAXON 80W-90 is also MAN 342 typ M1 approved.



Applications

Petro-Canada TRAXON is recommended for 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 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 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 only and a GL-5/MT-1 oil is not acceptable

Typical Performance Data

PROPERTY	TEST METHOD	TRAXON 80W-90
Density, kg/L, 15°C (60°F)	ASTM D4052	0.8883
Flash Point, COC, °C (°F)	ASTM D92	219 (426)
Kinematic Viscosity, cSt @ 40°C (SUS @ 100°F) cSt @ 100°C (SUS @ 210°F)	ASTM D445	136.9 (714.2) 14.86 (78.6)
Brookfield Viscosity, cP @ -26°C (-14.8°F)	ASTM D2983	67,600
*Temperature for 150,000 cP, °C (°F)	ASTM D2983	-28.0 (-18.0)
Viscosity Index	ASTM D2270	109
Pour Point, °C (°F)	ASTM D5950	-36 (-33)
Channel Point, °C (°F)	3GP-029.1b	-45 (-49)
Foaming Sequence 1	ASTM D892	0/0
Sequence 2		0/0
Sequence 3		0/0
Phosphorus, % wt	ASTM D4951	0.10
Sulphur, % wt	ASTM D4294	2.32

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
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