

TRAXON™ XL SYNTHETIC BLEND 80W-140 GEAR OIL

Introduction

Petro-Canada's TRAXON XL Synthetic Blend 80W-140 is a premium multi-grade gear oil formulated for use in extreme high temperature operating conditions, where a GL-5 SAE 140 oil is called for, to provide outstanding long-lasting wear protection to extend equipment life and reduce downtime and maintenance costs. TRAXON XL Synthetic Blend provides excellent year-round performance, particularly for colder weather conditions, for excellent 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 gear oil delivers maximum performance.

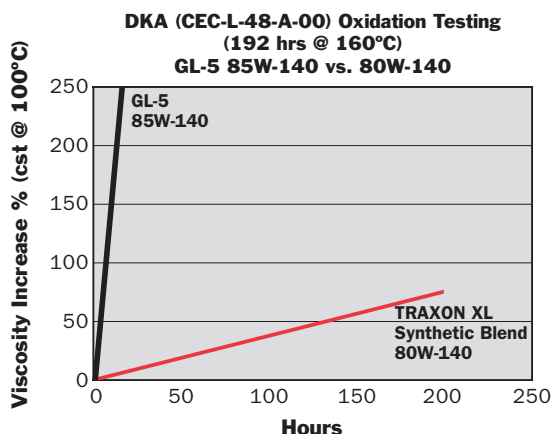
Features and Benefits

Excellent wear protection

- **Outstanding shear stability and anti-wear EP additives protects equipment in tough, high-load, extreme high operating 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
 - Anti-wear and extreme pressure (EP) additives provide superior protection against gear tooth spalling (where flakes of metal break away from the surface of a gear tooth after repeated stress)

Longer Life

- **TRAXON XL Synthetic Blend performs better than an API GL-5 85W-140 as measured by the DKA oxidation test. 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



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). TRAXON XL Synthetic Blend clearly outperforms the GL-5 85W-140 gear oil.

Improved Efficiency

- **FZG Efficiency Test demonstrates that Synthetic/Synthetic Blend GL-5 80W-140s provide better torque efficiency vs. mineral based GL-5 85W-140s (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

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.

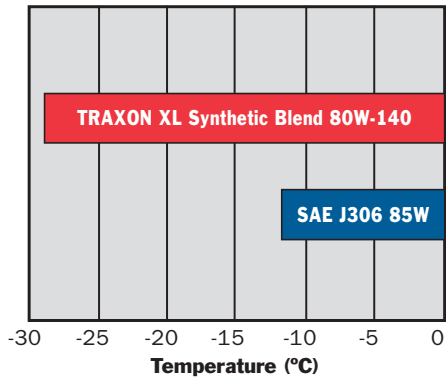


*based on highway, normal operation which must be reduced for severe service, vocational and/or off-road type applications.

Low temperature protection

- **Better low temperature protection for operation in colder weather**
 - Easier cold weather shifting
 - Better gear protection at colder temperatures

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



TRAXON XL Synthetic Blend 80W-140 protects equipment better in colder temperatures than 85W grades.

Industry & OEM Approvals

TRAXON XL Synthetic Blend 80W-140 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 XL Synthetic Blend 80W-140 is designed to meet API Gear Lubricant Service GL-5 and API MT-1 Gear Lubricant standard for heavy duty manual transmissions.

TRAXON XL Synthetic Blend 80W-140 is suitable for use where a Mack GO-J gear oil is specified. It also meets Scania STO 1:0 (axle only) and Meritor O-76-B specifications. It is listed by ZF as TE-ML lubricant class 05A, 12M, 16D and 21A (ZF002287) approved.

Applications

Petro-Canada TRAXON XL Synthetic Blend is recommended for year-round use particularly for 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 oil 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 API 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 only and a GL-5/MT-1 oil is not acceptable

Typical Performance Data

PROPERTY	TEST METHOD	TRAXON XL SYNTHETIC BLEND 80W-140
Density, kg/L, 15°C (60°F)	ASTM D4052	0.873
Flash Point, COC, °C (°F)	ASTM D92	195 (384)
Kinematic Viscosity, cSt @ 40°C (SUS @ 100°F) cSt @ 100°C (SUS @ 210°F)	ASTM D445	253 (1328) 26.0 (126)
Brookfield Viscosity, cp @ -26°C (-14.8°F)	ASTM D2983	84,600
*Temperature for 150,000 cP, °C (°F)	ASTM D2983	-28.9 (-20.0)
Viscosity Index	ASTM D2270	133
Pour Point, °C (°F)	ASTM D5950	-36 (-33)
Channel Point, °C (°F)	3GP-029.1b	<-45 (<-49)
Foaming Resistance Sequence 1	ASTM D892	0/0
Sequence 2		10/0
Sequence 3		0/0
Phosphorus, % wt	ASTM D4951	0.098
Sulphur, % wt	ASTM D4294	1.38

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
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or contact us at: **lubecsr@petrocanadalsp.com**



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