

TRAXON™ SYNTHETIC CD-50

Introduction

TRAXON Synthetic CD-50 is a fuel efficient commercial vehicle manual transmission fluid recommended for use in older designed Heavy Duty Manual Transmissions that are no longer covered by OEM extended warranty programs, such as those manufactured by **Eaton, Mack, International/Navistar** and **Meritor**.

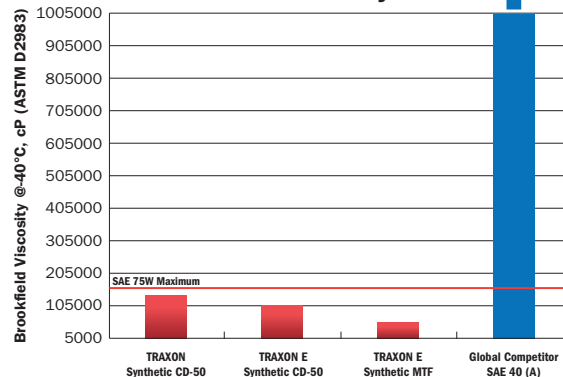
TRAXON Synthetic CD-50 starts with the HT Purity Process to produce a 99.9% pure, crystal clear base oil. By removing the impurities that can hinder the performance of competitive conventional oils, and blending in specialty additives, the TRAXON gear oil family delivers maximum performance.

Features and Benefits

This SAE 50 synthetic manual transmission fluid provides year-round performance where a non-EP fluid is required. It contains a unique anti-wear additive, as well as rust, oxidation and corrosion inhibitors to protect vital transmission parts.

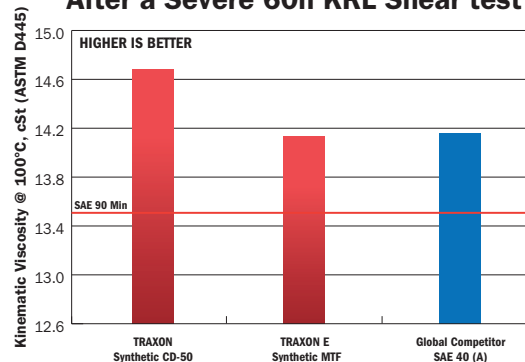
- **Wear Protection**
 - Unique anti-wear additives that help promote long life for transmission components
- **Year Round Protection**
 - Provides excellent high temperature performance and easier cold weather shifting for maximized uptime
 - Low temperature performance is better than the global leading competitor and maintains an SAE 75W grade
 - High temperature viscometrics after a severe 60 hr KRL Shear test indicates stay in grade viscosity as an SAE 90 and directionally better than TRAXON E Synthetic MTF and Global Competitor
- **Less Transmission Friction and Drag**
 - Helps increase fuel economy versus conventional manual transmission fluid
- **Long Life**
 - Provides extended drain capabilities for less change-outs and reduced maintenance
 - Better than a global competitive product as seen in DKA comparison
- **Exceptional Value**
 - Provides exceptional value, long fluid life and lowers operating cost of units that are off the extended OEM warranty

Low Temperature Viscosity



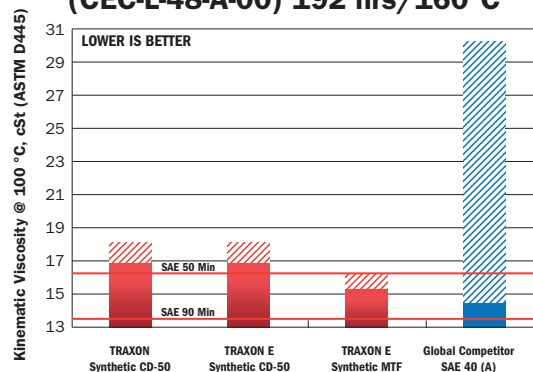
TRAXON Synthetic CD-50 meets the low temperature viscosity requirement of an SAE 75W at -40°C whereas the Global Competitor (A) product turns solid.

Viscosity at 100°C (CEC-L-45-00) After a Severe 60h KRL Shear test



Even after the 60hr KRL shear test, TRAXON Synthetic CD-50 maintains its viscosity and does not shear out of grade.

Fresh and after DKA Oxidation testing (CEC-L-48-A-00) 192 hrs/160°C



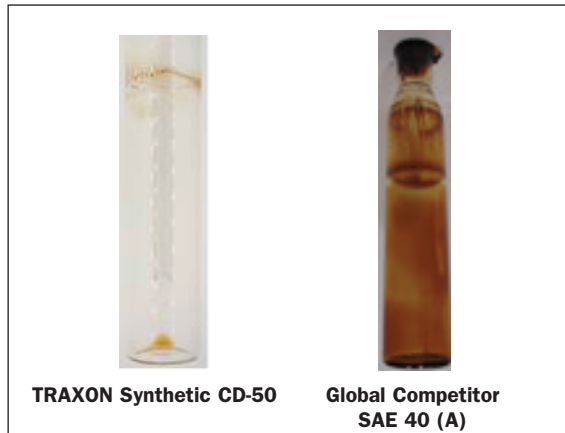
In the DKA oxidation test, product performance is measured by how the fluid resists viscous increase over time (therefore the lower the viscosity change after 192 hours, the better). Compared to TRAXON E Synthetic CD-50 and TRAXON E Synthetic MTF, TRAXON Synthetic CD-50 resists oil degradation and thickening similarly and much better than the Global Competitor (A).

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.



**DKA Oxidation testing tubes
(CEC-L-48-A-00) 192 hrs/160°C**



TRAXON Synthetic CD-50 shows excellent oxidation and thermal stability versus Global Competitor A as shown above. Indication of better surface cleanliness with reduced sludge and deposit, which can help transmissions run at optimum efficiency and combat and demonstrates fluid stability even when exposed to hot temperatures.

Applications

TRAXON Synthetic CD-50 is suitable for use* in out-of-warranty heavy duty manual transmissions, such as those manufactured by **Eaton, Mack, International/Navistar** and **Meritor**.

PROOF IN THE FIELD

TRAXON Synthetic CD-50's additive technology has undergone extensive bench and field testing of which have demonstrated excellent performance in extended drain and severe service applications. **Field testing included extreme multi-year fleet testing of >100 truck transmissions where drain intervals hit greater than 800,000 km/500,000 miles**** and had excellent end of inspection results.

This product also meets and exceeds the performance requirements for: API GL-4 and MT-1.

Typical Performance Data

PROPERTY	TEST METHOD	TRAXON SYNTHETIC CD-50
Density, kg/L @ 15°C/60°F	ASTM D4052	0.868
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	105.9 (539) 17.1 (88.1)
Brookfield Viscosity cP @ -40°C	ASTM D2983	132,300
Viscosity Index	ASTM D2270	177
Pour Point, °C (°F)	ASTM D5950	-42 (-44)
Foaming characteristics Sequence 1 Sequence 2 Sequence 3	ASTM D892	0/0 10/0 0/0
Copper Corrosion 3 hr. @ 121°C/250°F	ASTM D130M	1b

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

* Not for use in certain extended warranty OEM programs.

** Results may vary due to, but not limited to operating severity. Extending drain intervals should always be undertaken in conjunction with an oil analysis program.

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**

