



Product | Type

**QUANTUM
(CVTF)
Synthetic**

Continuously Variable Transmission

A High Performance Synthetic Multi-Vehicle Continuously Variable Transmission (CVT)

Product Highlights

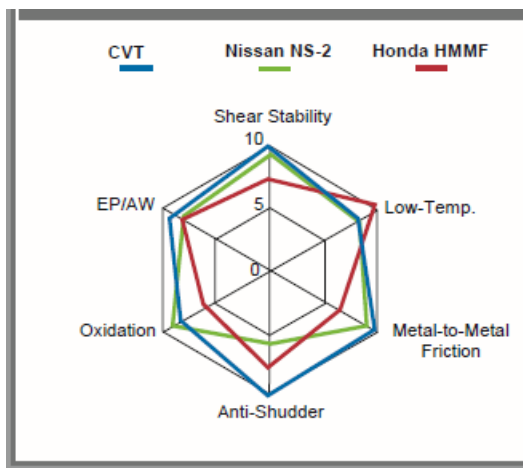
Designed for use in various CVT applications and as a part of the design, Continuously Variable Transmissions (CVTs) Operate very differently from traditional stepped automatic transmissions, therefore, the overall requirements of a CVT fluid are unique. Friction performance is critical, it is necessary to have correct level of metal friction and clutch friction, There are two main types of CVT; the push belt CVT and the chain CVT The two types of CVT will either have torque converter clutch or a wet Start clutch. The Quantum Petroleum Synthetic CVT Fluid provides outstanding metal-to-metal frictional properties and excellent protection and performance for CVTs throughout vehicle manufacturer-recommended drain intervals.

Rigorous Testing

The performance of Quantum CVT has been demonstrated in extensive testing including:

- Viscosity
- Shear Stability
- Low Temperature Fluidity
- Anti-Foam
- Oxidation
- Anti-Shudder Durability
- Wear
- Metal-to-Metal Friction

The test results prove that Quantum CVT as equal, and in most cases better performance than the most commercially available CVTFs being supplied by leading OEMs.





QUANTUM (CVTFS) Continuously Variable Transmission

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**Nissan
NS-2**



Elements:
Medium-heavy wear
Pulleys:
Light-medium wear

**Honda
HMMF**



Elements:
Light-medium wear
Pulleys:
Medium wear

**Quantum
CVT**



Elements:
Very light wear
Pulleys:
Light wear

Field Testing

Quantum CVT has undergone field testing in both belt and chain type CVTs in comparison with OEM branded fluids. In all tests Quantum CVT performed

CVT Belt Box Durability Test

The wear analysis of belt elements and pulleys in this Durability test shows that Quantum CVT has superior Metal-to-metal wear protection as compared to both The Nissan and Honda CVT fluids.

CVT Formulation with Quantum CVT

Viscosity, Stability and Low Temperature Fluidity Performance

Fluids blended with Quantum CVT have similar physical properties to both the Nissan and Honda fluids.

As the chart above shows all the fluids have very good low temperature properties and good shear stability



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RESULTS

Order	1
Sample	07505-16
Sampling/Oil change	Sampling
Sampling date	12/04/2016
Analysis date	12/04/2016
Diagnosis date	12/04/2016
Equipment life hours	-
Oil life hours	-
Top up (l)	-

Viscosity 40°C ASTM D7042

Viscosity 40°C mm2/s	44.26
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Viscosity 100°C ASTM D7042

Viscosity 100°C mm2/s	8.788
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Viscosity index ASTM D2270

Viscosity Index	183
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Flash point ASTM D93

Flash Pensky-Martens °C	182.0
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Base No.ASTM D2896

TBN mgKOH/g	3.8
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Density 15°C ASTM D4052

Density kg/m3	853.6
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Pour point ASTM D97

Pour Point °C	-42
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Spectrometry

Al ppm	<1
Ba ppm	<1
B ppm	324
Ca ppm	628
Cr ppm	<1
Cu ppm	<1
Fe ppm	<1
Pb ppm	<1
Mg ppm	<1
Mn ppm	<1
Mo ppm	<1
Ni ppm	<1
P ppm	594
K ppm	<1
Si ppm	5
Ag ppm	<1
Na ppm	<1
Sn ppm	<1
Ti ppm	<1
V ppm	<1
Zn ppm	38



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Application

QUANTUM PETROLEUM Synthetic CVT Fluid is recommended for belt- and chain-type continuously variable transmissions requiring the following:

- Audi/VW TL 52180, G 052 180, G 052 516
- BMW 8322 0 136 376, 8322 0 429 154, EZL 799A
- Daihatsu Amix CVTF-DC, CVTF-DFE
- Dodge/Jeep NS-2, CVTF+4®, MOPAR® CVT 4
- Ford CVT23, CVT30, WSS-M2C933-A, Motorcraft ® XT-7-QCFT, MERCON® C
- GM/Saturn DEX-CVT, CVTF I-Green2
- Honda HMMF, HCF-2
- Hyundai/Kia SP-CVT 1
- Mazda CVTF 3320
- Mercedes-Benz CVT28, 236.20
- Mini Cooper EZL 799A, ZF CVT V1
- Mitsubishi DiaQueen CVTF-J1, CVTF-J4
- Nissan NS-1, NS-2, NS-3
- Punch EZL 799A
- Shell Green 1V
- Subaru e-CVTF, i-CVTF, Lineartronic® CVTF, K0425Y0710, CV-30
- Suzuki CVTF 3320, TC, NS-2, CVTF Green1, CVTF Green 2
- Toyota/Lexus TC, FE

SERVICE LIFE QUANTUM PETROLEUM Synthetic CVT Fluid should be changed according to your vehicle manufacturer's recommendations

Benefits

QUANTUM (CVTFS) additive containing an embedded viscosity modifier to reduce complexity.

Performance

Recommended for use in all belt-CVT and chain-CVT applications

Comments

A Multi-Vehicle CVT fluid formulated with QUANTUM (CVTFS) is not recommended for Toyota Hybrid CVT applications such as those found in the Prius.

Red dye is added for identification.