Petro-Canada

TechData

DURADRIVETM MV SYNTHETIC AUTOMATIC TRANSMISSION FLUID

PETROCANADA

MULTI-VEHICLE ATF

Introduction

Petro-Canada DuraDrive™ MV Synthetic Automatic Transmission Fluid (ATF) is a full synthetic high viscosity formulation that offers true multi-vehicle performance, outstanding wear protection, and exceptional fluid life. DuraDrive MV Synthetic ATF provides the frictional properties, wear protection and viscometrics needed by most major North American, Asian, and European automatic transmissions. It is specially formulated to provide consistent shift feel and transmission protection over a long fluid life. DuraDrive MV Synthetic ATF's benefits include excellent oxidation and shear stability, outstanding wear protection, and exceptional low temperature fluidity. It also provides industry leading antishudder durability (ASD) and frictional stability; exceeding the performance of many genuine OEM fluids.

DuraDrive MV Synthetic ATF uses Petro-Canada's 99.9% pure PURITY™ VHVI synthetic base oils. Used in combination with leading edge additive technology this allows DuraDrive MV Synthetic ATF to retain its "fresh oil" properties longer, thereby delivering exceptional performance and savings. DuraDrive MV Synthetic ATF also provides savings through inventory consolidation by offering true multivehicle performance.

Features and Benefits

- Excellent resistance to oxidative and thermal breakdown
 - Prevents corrosion and the formation of harmful sludge and deposits. Keeps transmissions clean & functioning properly
 - · Protects clutches from glazing
 - Passes General Motor's Oxidation Test (GMOT) and Ford's Aluminum Beaker Oxidation Test (ABOT) illustrating excellent oxidation resistance
- Exceptional low / high temperature fluidity
 - Delivers quick lubrication of transmission components in cold weather
 - Maintains desired viscosity & oil film strength in high temperature operation

- Earlier drive away and smooth gear shifting during low temperature operation
- Efficient heat removal from clutch surfaces, extends clutch life

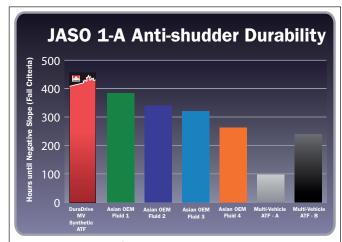
Outstanding anti-wear protection

- Reduces wear on bearings, bushings and gears
- Extends transmission life
- Suitable for heavy loading & high operating temperatures

Compatible with all transmission seal materials

- Helps to maintain seal integrity and prevent leaks
- Outstanding anti-shudder durability and stable friction properties
 - Excellent shift quality throughout service life
 - · Avoids vehicle shudder while stopped
 - Maintains transmission efficiency & fuel economy
 - High torque capacity avoids clutch slippage & wear
 - Prevents clutch shudder in modulated torque converters
 - · Clutch plates and bands last longer

Enhanced Anti-shudder Durability



DuraDrive MV Synthetic ATF delivers longer antishudder protection than OEM or competitor fluids.

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.



Applications

Petro-Canada DuraDrive MV Synthetic ATF is suitable for use in a wide range of North American, Asian, and European automatic transmissions.

- Fully approved against MERCON® V (licence M5080701)
- Exceeds JASO 1A requirements
- Please consult the Application Charts to view the applications listed where DuraDrive MV Synthetic ATF would be suitable

Passenger Car Automatic Transmission Applications Chart

Application	High Viscosity Specification/Vehicle	Class		
	Ford MERCON® V	Approved (M5080701)		
Passenger Car -	Ford MERCON®	SFU		
North American	Chrysler ATF +3®, MOPAR ASRC	SFU		
OEM	Ford FNR5	SFU		
	GM TASA, DEXRON® II (IID, IIE) III (IIIF, IIIG, IIIH)	SFU		
	Saturn T-IV Fluid	SFU		
Application	High Viscosity Specification/Vehicle	Class	Low Viscosity Specification/Vehicle	Class
	Aisin Warner JWS 3309 (T-IV) ¹	SFU	Aisin Warner JWS 3324 (WS)	SFU*
			Aisin Warner AW-1	SFU*
			DSIH 6p805 (Geely, Ssangyong, Mahindra 6 sp)	SFU*
	Honda ATF Z1	SFU	Honda DW-1	SFU*
	Hyundai/Kia SP-II, SP-III, JWS 3314, JWS 3317	SFU	Hyundai/Kia SP-IV, SPH-IV, SP-IV RR, SPIV-M	SFU*
			Hyundai NWS-9638	SFU*
	Idemitsu K17 (JATCO)	SFU		
Passenger Car -	JASO 1A	Meets	JASO 1A-LV	SFU*
Asian OEM	Kia Red-1	SFU		
	Mazda ATF F-1, ATF M-III, ATF M-V	SFU		
	Mitsubishi Diaqueen J2	SFU	Mitsubishi Diaqueen J3 / Diaqueen ATF PA	SFU*
	Mitsubishi SP-II, SP-III	SFU	Mitsubishi SP-IV	SFU*
	Nissan 402, Nissan Matic D, J, K	SFU	Nissan Matic S, W	SFU*
	Subaru ATF, ATF-HP	SFU		
	Suzuki 3314, 3317	SFU		
	Toyota T, T-II, T-III, T-IV ¹	SFU	Toyota WS (JWS 3324)	SFU*
	Audi G 052 162, G 052 990, G 055 025	SFU	Audi G 055 005, G 055 162	SFU*
Passenger Car - European OEM	BMW 7045E (3 Series), 8072B (BMW 5 Series), LA 2634, LT 71141	SFU	BMW 83 22 0 142 516	SFU*
	Mercedes-Benz MB 236.10 (NAG 1 / Shell 3403)	SFU	Mercedes-Benz 236.12, 236.14, 263.15, 236.41	SFU*
	Mercedes-Benz; MB 236.1, 236.2, 236.3, 236.5, 236.6, 236.7, 236.9, 236.11, 236.81	SFU		SFU*
	Peugeot Societe Anonyme (PSA) AL-4	SFU		
	Renault DP-0	SFU		
	Saab 3309	SFU	Saab 93 165 147	SFU*
	Texaco N402 (JATCO), ETL-7045E (BMW 7045E), ETL-8072B (BMW 5 Series)	SFU		
	Volvo 4 speed (P/N 1161621)	SFU	Volvo 6 speed MY 2011-2013 (P/N 31256774 or 31256675)	SFU*
	Volvo P/N 1161540/1161640 ¹	SFU		
	VW G 052 162, G 052 990, G 055 025	SFU	VW G 052 540, G 055 005, G 055 162	SFU*
	ZF TE-ML 09, 11 (3/4/5 speed)	SFU	ZF 6 speed (S671 090 255)	SFU*

- Suitable for Use (SFU) = Determined to be suitable based on engineering judgement supported by test data such as laboratory or field testing.
- NOT recommended for CVT** and DCT transmissions or when a non-friction modified fluid is recommended (e.g. Ford Type F).
- · Always consult the vehicle owner's manual for specific transmission fluid recommendations.
- ¹ Except AWTF80-SC transmissions or MY 2008-2010 V70
- * DuraDrive MV Synthetic ATF is a high viscosity formulation and does not meet the viscosity profiles of these low viscosity specifications. Field testing results have demonstrated proof of no harm but product will not provide the potential fuel economy benefits of the low viscosity genuine oils.
- ** Some e-CVT designs require the use of Automatic Transmission Fluids; therefore, DuraDrive MV Synthetic ATF is suitable for use where "SFU" is claimed for the appropriate ATF Specification/Vehicle.

Passenger Car Transfer Case and Power Steering Applications Chart

Application	Specification/Vehicle	Class
	Ford MERCON® V	Approved (M5080701)
	Ford M	SFU
Transfer Case	Ford Part#XL-12	SFU
liansier Case	GM IID, IIIH	SFU
	GM AutoTrak II	SFU
	Mercedes GL-450 (ATF 3403)	SFU
	Chrysler MS-1872, MS-5931, P/N 04883077, MS 9602	SFU
	Chrysler MS-10838 P/N 05142893AA	SFU
	Ford M2C195-A	SFU
	GM P/N 89021184, P/N 1052884 (GM 9985010)	SFU
	GM P/N 12345866 (GM 9985835)	SFU
	Hyundai/KIA PSF-3	SFU
Power Steering	Mercedes-Benz 236.3 (P/N 000 989 88 03)	SFU
	Mitsubishi PS fluid, Diamond SP-III	SFU
	Nissan PSF-II	SFU
	Saab P/N 45 30 09 800	SFU
	Subaru P/N K0209A0080	SFU
	Toyota PSF Type EH P/N 008886-01	SFU
	ZF TE-ML 09	SFU

 $\mathsf{MERCON}^{\circledast}$ is a registered trademark of Ford Motor Company

Typical Performance Data

PROPERTY	ASTM TEST METHOD	DuraDrive MV Synthetic ATF
Density, kg/l @ 15°C (60°F)	ASTM D4052	0.852
Colour	Visual	Red
Flash Point, °C / °F	ASTM D92	206 (403)
Pour Point, °C / °F	ASTM D5950	-54 (-65)
Viscosity, cSt @ 40°C / (SUS @ 100°F) cSt @ 100°C / (SUS @ 210°F)	ASTM D445	36.1 (183) 7.4 (51)
Viscosity Index	ASTM D2270	178
Brookfield Viscosity, cP @ -40°C (-40°F)	ASTM D2983	11,538
Qualification Numbers Ford	-	MERCON ® V M5080701
Product Identification Code		DDMVATF

The values quoted above are typical of normal production. They do not constitute a specification. MERCON® is a registered trademark of Ford Motor Company

Health and Safety

To obtain Material Safety Data Sheet (MSDS), contact one of Petro-Canada's TechData Info Lines.

TechData Info Lines

If you are an existing customer looking 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/Europe/Asia	Phone +1-866-957-4444

You can also e-mail us at lubecsr@suncor.com

ISO 9001 ISO 14001 ISO/TS 16949

If you would like to become a Petro-Canada lubricants customer and require more information about specialty fluids, oils and greases that can help maximize your equipment performance, savings and productivity, please contact us at:

North America	Phone 1-866-335-3369
Europe	Phone +44 (0) 121-781-7264
Germany	Phone 0800-589-4751
China	Phone +86 (21) 6362-0066

Visit us on the web at lubricants.petro-canada.com

