



**PETRONAS**

**Working together  
to protect your Truck's  
Hidden Heroes**

**PETRONAS  
Tutela**

Championing the Hidden Heroes.





# Ready for the world of tomorrow, today

PETRONAS Lubricants International (PLI) is part of the PETRONAS Group. With 10 blending plants, over 30 sales offices and products distributed in more than 90 countries worldwide, PLI's global network of over 240 scientists, technical professionals and engineers anticipate future mobility challenges and opportunities, then research and develop advanced fluid technology solutions to meet tomorrow's challenges, today.

We strive to deliver maximum value to our customers, the markets in which they compete and consumers – while minimising our impact on the environment, pioneering high performance fluids that are dedicated to emission reduction and manufactured in increasingly low CO<sub>2</sub> environments.

**We're an ambitious business, driven by a relentless, restless energy.**  
**What's next? What if?**  
**How can we? Why don't we?**

**We're unstoppable.**  
**We are PETRONAS.**

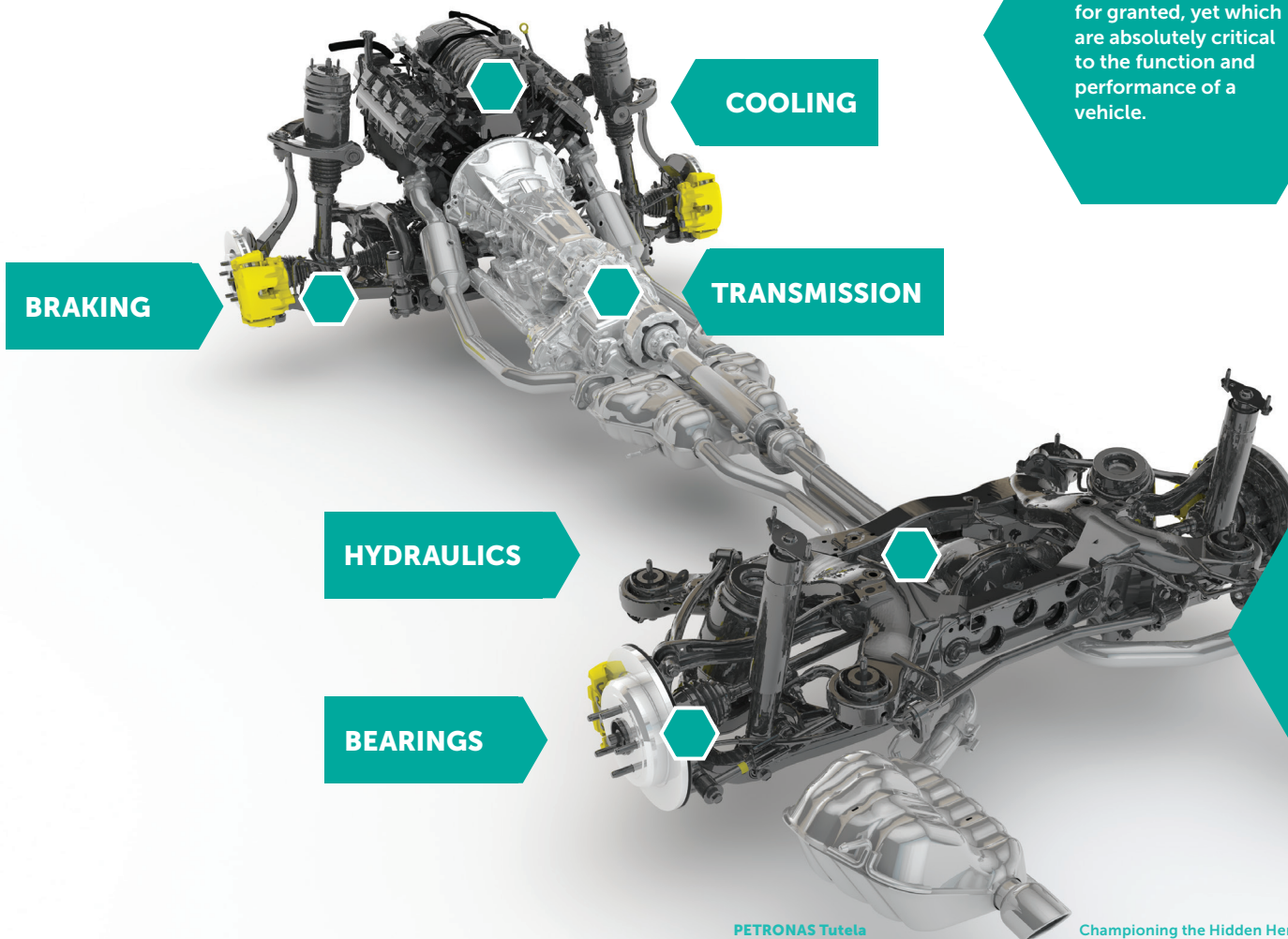




# Meet the Hidden Heroes

At PETRONAS, we understand that a vehicle's engine is only part of its overall performance story. There are a number of other extremely hardworking systems that are just as critical to a vehicle's efficient, continued performance – systems that demand a technically advanced fluid system, but which are often under-valued and overlooked.

We call these systems the Hidden Heroes – and PETRONAS Tutela is here to champion them all.



Ancillary systems that too often are taken for granted, yet which are absolutely critical to the function and performance of a vehicle.

Each Hidden Hero plays a vital role in a truck's safe, effective operation, performing in extremely demanding conditions. The pressures experienced within a Transmission System far exceed those seen anywhere else in the vehicle. The Cooling System has to rise to the challenge of diffusing the heat output of modern engines running hotter than ever, while still delivering in colder, icy climates.

It's a tough job for our Hidden Heroes – and it's only going to get tougher...

# The demands on our Hidden Heroes are only going to increase

## We live in a rapidly changing world.

As vehicle technologies continue to evolve and improve, so the demands placed on our Hidden Heroes build and grow.

With a steep increase in road freight transport predicted by 2030, along with increased instant deliveries, we can expect more city traffic than ever. This means more stop-start driving, more engines running at higher temperatures, and more stress for transmission systems and fluids.

Add to that the fact that 80% of the world's population will live in cities by 2030, and the issue will only get worse...

But it doesn't end there. Environmental demands mean the number of electric trucks on the road will increase, which means transmissions have to operate with higher rotating speeds at constant torque – leading to higher temperatures, louder noise and oil splash.

Transmission fluids need to offer improved heat resistance and thermal stability – and maintain the protective film between metal surfaces in extreme conditions. They also need to deliver fuel efficient performance to meet the demands for net zero CO<sub>2</sub> emissions.

**It all leads to more of the low speed, low gear stop/start traffic conditions that place our Heroes under extreme operating pressure.**

Road freight transport is expected to increase by **40%** by 2030.

European Commission Logistics and Multimodal Transport Forum 2015

**20 to 25%** of parcel deliveries will be same-day and instant delivery by 2025.

McKinsey, 'Parcel delivery: the future of the last mile', September 2016

Electric trucks (eTrucks) could account for **15%** of global truck sales by 2030.

Energy Insights by McKinsey, September 2017

**Net zero**  
CO<sub>2</sub> emissions by 2050.

International Institute for Applied Systems Analysis, 2017



# Our brand promise: **Championing the Hidden Heroes**

It's a promise that represents our commitment to researching and developing fluids that are specifically engineered to protect all of a vehicle's systems, and a promise to support the individuals fitting and using our products, whether in passenger or commercial vehicles.

We will share our knowledge to guide those who are less confident, giving them the tools they need to select and fit the right fluid.

And we'll champion and support everyone that – like us – understands the absolute commercial imperative to keep a vehicle's ancillary systems performing at their peak, in order to maximise availability and minimise repair costs.

**TRANSMISSION**



**BRAKING**



**COOLING**



**BEARINGS**



**HYDRAULICS**







# The Transmission System: Guardian of the vehicle's power

## Meet our first Hidden Hero

Complex and operating under continual pressure at high temperatures, a vehicle's Transmission System is the very definition of a Hidden Hero. And all that stands between the full power of a vehicle driving metal against metal is a thin layer of protective molecules. You can trust PETRONAS Tutela to withstand pressure, enhance performance and efficiency and extend the life of moving parts – today and tomorrow.

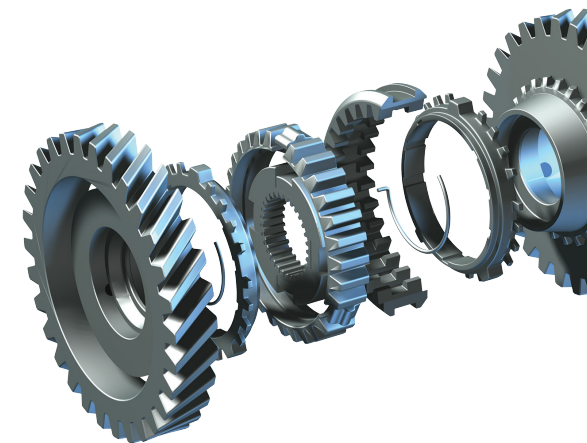
- **Improved fuel efficiency** – PETRONAS Tutela transmission fluids combine lower viscosity with strengthened fluid film resistance, to reduce friction and improve fuel efficiency without compromising on protection.
- **Defends against mechanical stress, to help avoid unexpected downtime and extend the working life** – our transmission fluids have anti-wear and anti-pitting properties to help extend the life of the Transmission System, and outstanding shock load resistance to protect the axle.

- **Increased oil drain intervals for commercial vehicles** – PETRONAS Tutela's increased thermal stability and durability allow it to resist thermal and mechanical stress for longer, extending the service intervals and reducing downtime and maintenance costs.
- **Performance even at low temperatures** – PETRONAS Tutela protects the transmission system and provides a smooth gear shift experience from the moment the engine starts up, even in cold and icy conditions.
- **Ready to tackle the increased electrification of the driveline** – PETRONAS Tutela's premium products offer lower electrical conductivity, high heat capacity, high thermal conductivity and low evaporation loss, making them fully compatible with electrical systems.
- **Ready to take on new speeds** – as vehicles continue to increase the number of gears available to drivers, the number of moving components also increases, which

means more heat is generated. The lower viscosity and optimised friction characteristics of our newly launched premium products are able to effectively dissipate this heat while compensating for energy losses – we're ready for the speed requirements of tomorrow, today.

- **Multi-purpose fluids for increasingly automated transmissions** – in many transmission systems, the lubricant doubles up as the hydraulic fluid in the actuator and clutch – PETRONAS Tutela transmission fluid's optimised chemistry and viscosity rises to the challenge of multiple applications.
- **Enhanced noise and vibration control qualities** – our transmission fluids have superior anti-foaming properties and oil film resistance, along with optimised friction characteristics, for a more pleasant driver experience, with easier, smoother shift and less noise and shudder.





- **Smoother, more comfortable gear shifts** – with wider Synchroniser compatibility (manual and dual clutch transmission fluids), anti-shudder properties (automatic, dual clutch and continuously variable transmission fluids with torque converter) and torque transfer capacity (continuously variable transmission fluids).










# PETRONAS Tutela Range

## Vans & Trucks

Performance level	Design principles	Products	Fluid Type		Suitable for use in:	
			ATF	MTF	Axle	 
900	<ul style="list-style-type: none"> <li>Super premium, fully synthetic fluids</li> <li>In-warranty vehicles, both current &amp; future</li> <li>Normally 0-3yrs old</li> <li>Latest top tier specifications</li> </ul>	<ul style="list-style-type: none"> <li>ATF 900 HD</li> </ul>				




















Product Benefit						Approvals and Performance Specifications
Protection	Longer oil life	Fuel economy	Long drain interval	Longer Transmission Life	Smoother Cold Shift	
						MAN 339 Type V2, Z12; ZF TE-ML 20C; VOITH H55.6336.xx













































This table is intended to provide an indicative overview of the product benefits. For more detailed benefit descriptions, please visit the individual product pages.

○ Basic level – most fluids can offer this benefit level.  
 ● Max level – only few premium fluids can offer this benefit level.

# PETRONAS Tutela Range

## Vans & Trucks

Performance level	Design principles	Products	Fluid Type			Suitable for use in:	
			ATF	MTF	Axle		
700	<ul style="list-style-type: none"> <li>Premium fully synthetic fluids</li> <li>In-warranty current vehicles, and latest out of warranty</li> <li>Normally up to 6yrs old</li> <li>Top tier specifications</li> </ul>	• ATF 700 HD					
		• Multi ATF 700					
		• Multi MTF 700 75W-80					
		• MTF 700 DM 75W-90					
		• MTF 700 HD 75W-80					
		• Axle 700 EHD 75W-90					
		• Axle 700 EHD 75W-140					

Product Benefit							Approvals and Performance Specifications
Protection	Longer oil life	Fuel economy	Long drain interval	Longer Transmission Life	Smoother Cold Shift	Reduced noise	
							MB-Approval 236.9; MAN 339 Type L1, Z2, Z11, V2; Volvo 97341, VOITH H55.6336.xx, ZF TE-ML 09, 14B, 20B DEXRON®-IIIH, Allison C-4, Allison TES-389, Allison TES-295, Volvo 97340
							GM Dexron VI; Ford MERCON LV JASO M315-2013 1A-LV, 1A, 2A ; JWS 3309, JWS 3324, JWS 3317
							For virtually all modern and older manual transmissions requiring API GL-4
							MB-Approval 235.11 API GL-4 MAN 341 Type MB
							MAN 341 Type Z4; Volvo 97307; ZF TE-ML 01L, 02L, 08 API GL-4 DAF; Eaton Europe (300.000km 3 years); Renault Note technique B0032/2 Annex 3
							SAE J2360, API GL-4/GL-5/MT-1, MIL PRF-2105E Meritor O-76N; MAN 341 Type Z2, 342 Type S1; MB-Approval 235.8; SCANIA STO 2:0A FS; Volvo 97312; ZF TE-ML 02B, 05A, 07A, 12L, 12N, 16B, 16F, 17B, 19C, 21A; DAF; DETROIT DIESEL DFS93K219.01; MACK GO-J; Renault Note technique B0032/2 Annex 3
							SAE J2360, API GL-5/MT-1, MIL PRF-2105E Meritor O76M; SCANIA STO 1:0; ZF TE-ML 07A, 12N, 19C MACK GO-J; Scania High Performance Oil















This table is intended to provide an indicative overview of the product benefits.  
For more detailed benefit descriptions, please visit the individual product pages.
























 Basic level – most fluids can offer this benefit level.  
 Max level – only few premium fluids can offer this benefit level.





# PETRONAS Tutela Range

## Vans & Trucks

Performance level	Design principles	Products	Fluid Type			Suitable for use in:	
			ATF	MTF	Axle		
500	<ul style="list-style-type: none"> <li>Premium part synthetic fluids</li> <li>For older vehicles, normally out of warranty</li> <li>Normally up to 10yrs old</li> <li>Mid-tier specifications</li> </ul>	• ATF 500 HD					
		• Multi ATF 500					
		• MTF 500 75W-90					
		• Axle 500 75W-90					
		• Axle 500 LS 75W-90					



Product Benefit						Approvals and Performance Specifications	
							MAN 339 Type Z1, V1; MB-Approval 236.1 / 236.9; Volvo 97341; VOITH H55.6335.xx; ZF TE-ML 09, 14A, 17C DEXRON®-IIIH, Allison TES-389, Allison C-4 (TES-228); Volvo 97340
							GM DEXRON®-VI JASO M315-2013 1A, JASO M315-2013 2A; JWS 3309, JWS 3314, JWS 3317
							API GL-4
							API GL-5, MIL PRF-2105D ZF TE-ML 07A, 08
							API GL-5, MIL PRF 2105D

This table is intended to provide an indicative overview of the product benefits. For more detailed benefit descriptions, please visit the individual product pages.

 Basic level – most fluids can offer this benefit level.  
 Max level – only few premium fluids can offer this benefit level.

# PETRONAS Tutela Range

## Vans & Trucks

Performance level	Design principles	Products	Fluid Type			Suitable for use in:	
			ATF	MTF	Axle		
300	<ul style="list-style-type: none"> <li>Top quality mineral multi-grade oils</li> <li>For older vehicles out of warranty</li> <li>Normally up to 15yrs old</li> <li>Old specifications</li> </ul>	• ATF D3	●			●	●
		• MTF 300 HD 80W		●			●
		• MTF 300 80W-90		●			●
		• Axle 300 EHD 80W-90			●		●
		• Axle 300 HD 80W-90		●	●	●	●
		• Axle 300 EHD 85W-140			●		●
		• Axle 300 80W-90			●	●	●
		• Axle 300 LS 80W-90			●	●	●
		• Axle 300 85W-140			●	●	●

Protection  
Longer oil life  
Fuel economy  
Long drain interval  
Longer Transmission Life  
Smoother Cold Shift  
Reduced noise



Product Benefit						Approvals and Performance Specifications	
●				●	●	●	JASO M315-2013 1A, JASO M315-2013 2A GM DEXRON®-III/IIH, Allison C-4, Ford Mercon®, Bosch TE-ML 09, ZF TE-ML 09
●			●	●	○	○	MB-Approval 235.1, ZF TE-ML 08, 17A API GL-4 MAN 341 Type E2
●				●	○	●	API GL-4
●			●	●	●	●	SAE J2360, API GL-5/MT-1 MAN 342 Type M2; Meritor O76D, SCANIA STO 1:0; MIL PRF-2105E, MACK GO-J
●			●	●	○	●	MB-Approval 235.6; MAN 342 type M2; Scania STO 1.0; ZF TE-ML 07A, 08, 12L, 12M, 17B, 19B API GL-4/GL-5
●			●	●		●	SAE J2360, API GL-5/MT-1, MIL PRF-2105E Meritor O76A, SCANIA STO 1:0, MACK GO-J
●				●	○	●	API GL-5; MIL PRF-2105D MAN 342 Type M1, Type M2; ZF TE-ML 07A, 08, 12E, 17B, 19B, NATO O-226
●				●	○	●	API GL-5 ZF TE-ML 05C, 12C
●				●		●	API GL-5; MIL PRF-2105D ZF TE-ML 07A, 08, 12E

This table is intended to provide an indicative overview of the product benefits.  
For more detailed benefit descriptions, please visit the individual product pages.



# PETRONAS Tutela Range

## Vans & Trucks

Performance level	Design principles	Products	Fluid Type			Suitable for use in:	
			ATF	MTF	Axle		
100	<ul style="list-style-type: none"> <li>High quality mineral oils</li> </ul>	• ATF D2	●			●	●
		• ATF TASA	●			●	●
	<ul style="list-style-type: none"> <li>For very old vehicles, out of warranty</li> </ul>	• MTF 100 SAE 80		●			●
		• 100 EP SAE 90		●	●		●
	<ul style="list-style-type: none"> <li>Normally over 15yrs old</li> </ul>	• 100 EP SAE 140		●	●		●
		• 100 SAE 90		●	●		●
	<ul style="list-style-type: none"> <li>Very old specifications</li> </ul>	• 100 SAE 140		●	●		●

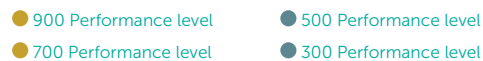
Protection  
Longer oil life  
Fuel economy  
Long drain interval  
Longer Transmission Life  
Smoother Cold Shift  
Reduced noise

Product Benefit						Approvals and Performance Specifications	
○					○		GM DEXRON®-IID, Allison C-3
○							GM Type "A" Suffix "A"
○							API GL-4 ZF TE-ML 24A
○							API GL-5
○							API GL-5
○							API GL-4
○							API GL-4

This table is intended to provide an indicative overview of the product benefits. For more detailed benefit descriptions, please visit the individual product pages.

○ Basic level – most fluids can offer this benefit level.  
● Max level – only few premium fluids can offer this benefit level.

Based on OEM approvals and specifications





# OEM Fit

## OEM Finder for Commercial Vehicle range

Products		Approvals & Specifications Profile	
ATF			
900	ATF 900 HD		MAN 339 Type V2, Z12; ZF TE-ML 16S, 20C, 25C; VOITH H55.6336.xx
700	ATF 700 HD		MB-Approval 236.9; MAN 339 Type L1, Z2, Z11, V2; Volvo 97341, VOITH H55.6336.xx, ZF TE-ML 04D, 09, 16L, 14B, 20B, 25B Suitable For Use: Dexron IIIH, Allison C-4, Allison TES-389, Allison TES-295, Volvo 97340
500	ATF 500 HD		MAN 339 Type Z1, V1; MB-Approval 236.1 / 236.9; Volvo 97341; VOITH H55.6335.xx; ZF TE-ML 03D, 04D, 05L, 09, 14A, 17C, 21L Suitable For Use: Dexron IIIH, Allison TES-389, Allison C-4 (TES-228); Volvo 97340
300	ATF D3		JASO M315-2013 1A, JASO M315-2013 2A, GM DEXRON®-IIIG/IIIH, Allison C-4, Ford Mercon®, Bosch TE-ML 09, ZF TE-ML 09
100	ATF D2		GM DEXRON®-IID, Allison C-3
	ATF TASA		GM Type "A" Suffix "A"
MTF			
700	MTF 700 DM 75W-90		API GL-4, MB-Approval 235.11 Suitable For Use: MAN 341 Type MB
	MTF 700 HD 75W-80		API GL-4, MAN 341 Type Z4; Volvo 97307; ZF TE-ML 01L, 02L, 08, 16K Suitable For Use: DAF; Eaton Europe (300.000km 3 years); Renault Note technique B0032/2 Annex 3
500	MTF 500 75W-90		API GL-4
300	MTF 300 HD 80W		API GL-4; MB-Approval 235.1, ZF TE-ML 08, 17A Suitable For Use: MAN 341 Type E2
	MTF 300 80W-90		API GL-4
100	MTF 100 SAE 80		API GL-4 ZF TE-ML 24A
AXLE FLUIDS			
700	Axle 700 EHD 75W-90		SAE J2360, API GL-4/GL-5/MT-1 Meritor O-76N; MAN 341 Type Z2, 342 Type S1; MB-Approval 235.8; SCANIA STO 2:0A FS; Volvo 97312; ZF TE-ML 02B, 05A, 07A, 12L, 12N, 16B, 16F, 17B, 19C, 21A; MIL PRF-2105E Suitable For Use: DAF; DETROIT DIESEL DFS93K219.01; MACK GO-J; Renault Note technique B0032/2 Annex 3
	Axle 700 EHD 75W-140		SAE J2360, API GL-5/MT-1, Meritor O76M; SCANIA STO 1:0; ZF TE-ML 05A, 07A, 12N, 16F, 19C, 21B; MIL PRF-2105E Suitable For Use: MACK GO-J; Scania High Performance Oil
500	Axle 500 75W-90		API GL-5, MIL PRF-2105D; ZF TE-ML 07A, 08
	Axle 500 LS 75W-90		API GL-5, MIL PRF 2105D
300	Axle 300 EHD 80W-90		SAE J2360, API GL-5/MT-1 MAN 342 Type M2; Meritor O76D, SCANIA STO 1:0; MIL PRF-2105E, Suitable For Use: MACK GO-J
	Axle 300 HD 80W-90		API GL-4/GL-5 MB-Approval 235.6; MAN 342 type M2; Scania STO 1:0; ZF TE-ML 05A, 07A, 08, 12L, 12M, 16B, 16C, 17B, 19B, 21A
	Axle 300 EHD 85W-140		SAE J2360, API GL-5/MT-1 Meritor O76A, SCANIA STO 1:0, MIL PRF-2105E Suitable For Use: MACK GO-J
	Axle 300 80W-90		API GL-5; Suitable for Use: MIL PRF-2105D; MAN 342 Type M1, Type M2; ZF TE-ML 05A, 07A, 08, 12E, 16B, 17B, 19B, 21A, NATO O-226
	Axle 300 LS 80W-90		API GL-5 ZF TE-ML 05C, 12C, 21C
	Axle 300 85W-140		API GL-5; Suitable for Use: MIL PRF-2105D; ZF TE-ML 05A, 07A, 08, 12E, 16C, 16D
GEAR OILS			
100	100 EP SAE 90		API GL-5
	100 EP SAE 140		API GL-5
	100 SAE 90		API GL-4
	100 SAE 140		API GL-4

Iveco	DAF	Mercedes	MAN	Scania	Volvo	Renault	Mack	ZF	Voith	Arvin Meritor	Eaton	Allison
Approved			Approved					Approved	Approved			
Approved		Approved	Approved		Approved			Approved	Approved			Approved
Approved		Approved	Approved		Approved			Approved	Approved			Approved
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		Approved	Approved									
Approved	Approved		Approved		Approved	Approved		Approved			Approved	
		Approved	Approved					Approved				
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Approved	Approved		Approved	Approved	Approved	Approved	Approved	Approved		Approved		
			Approved	Approved				Approved		Approved		
Approved			Approved	Approved		Approved				Approved		
Approved								Approved				

Specs Finder for CV Range

Products		SAE J2360 TES-295 C-4 C-3 MB 235.1 MB 235.11 MB 235.6 MB 235.8 MB 236.1 MB 236.9 MAN 339 Type L1 MAN 339 Type L2 MAN 339 Type Z1 MAN 339 Type Z2 MAN 339 Type Z3 MAN 339 Type Z11 MAN 339 Type Z12 MAN 341 Type V2 MAN 341 Type E2 MAN 341 Type MB MAN 342 Type Z2 MAN 342 Type S1 MAN 342 Type Z4 MAN 342 Type M1 MAN 342 Type M2																SCANIA STO 1.0 SCANIA STO 2.0A FS VOLVO 97307 VOLVO 97312 VOLVO 97340 VOLVO 97341 Renault 800322 Annex 3 DAF DD DD MACK Eaton DETROIT DIESEL D593K2901 Mack GO-1 Falcon Europe 500.000km 3 years Voith H55-6336 w O/H H55-6335 w Arvin O76D Meritor O76M NATO O26 Ford Mercon® API GL-4 API GL-5 API MT-1 PRF-2105D MIL PRF-2105E GM Dexron® III/H																		
ATF																																				
900	ATF 900 HD																																			
700	ATF 700 HD																																			
500	ATF 500 HD																																			
300	ATF D3																																			
100	ATF D2																																			
	ATF TASA																																			
MTF																																				
	Multi MTF 700 75W-80																																			
700	MTF 700 DM 75W-90																																			
	MTF 700 HD 75W-80																																			
500	MTF 500 75W-90																																			
300	MTF 300 HD 80W																																			
	MTF 300 80W-90																																			
100	MTF 100 SAE 80																																			
AXLE FLUIDS																																				
700	Axle 700 EHD 75W-90																																			
	Axle 700 EHD 75W-140																																			
500	Axle 500 75W-90																																			
	Axle 500 LS 75W-90																																			
300	Axle 300 HD 80W-90																																			
	Axle 300 EHD 80W-90																																			
	Axle 300 EHD 85W-140																																			
	Axle 300 80W-90																																			
	Axle 300 LS 80W-90																																			
	Axle 300 85W-140																																			
GEAR OILS																																				
100	100 EP SAE 90																																			
	100 EP SAE 140																																			
	100 SAE 90																																			
	100 SAE 140																																			

900 and 700 Performance level

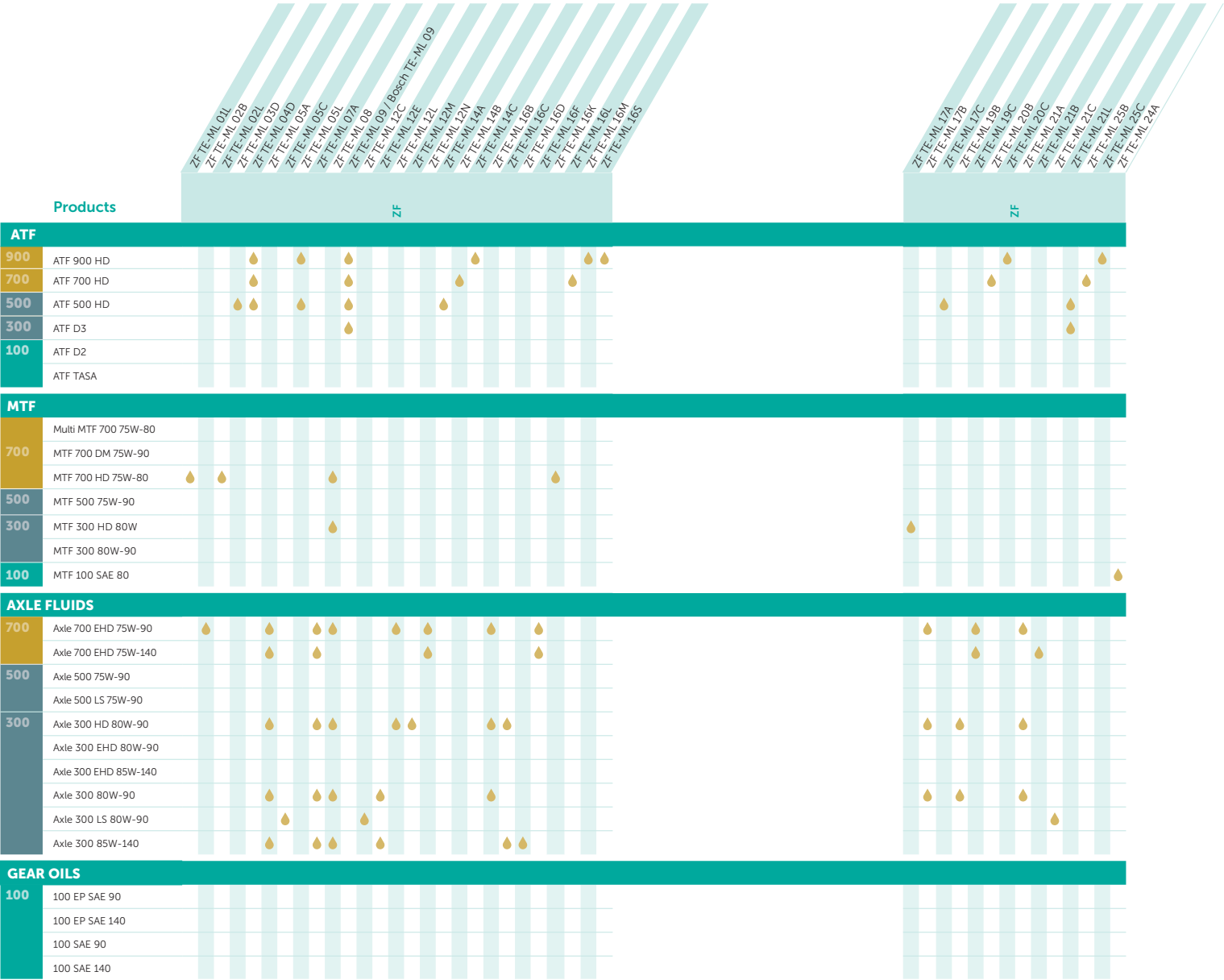
500 and 300 Performance level

100 Performance level

Approved

SFU

Specs Finder for CV Range contiued







# PETRONAS Tutela Automatic Transmission Fluids

Automatic transmissions generate even more intense heat than manual ones, so lubricant fluids often degenerate more quickly. Low levels of fluid or fluid with deposits within the transmission system can cause slipping and shifting issues – and overheating can lead to malfunction and a decrease in the overall life of parts.





































PETRONAS Tutela Automatic Transmission Fluids provide enhanced thermal and oxidation resistance to retain a stable viscosity at a wide range of temperatures. This helps optimise transmission efficiency for a range of vehicle types – leading to improved fuel economy. It also extends the fluid's life by preventing the formation of deposits, delivering a smooth, shudder-free drive, and lengthened Oil Drain Intervals for reduced servicing requirements.



# PETRONAS Tutela Range

## Automatic Transmission Fluids

Performance level	Design principles	Products		
900	<ul style="list-style-type: none"> <li>Super premium, fully synthetic fluids</li> <li>In-warranty vehicles, both current &amp; future</li> <li>Normally 0-3yrs old</li> <li>Latest top tier specifications</li> </ul>	• ATF 900 HD		
700	<ul style="list-style-type: none"> <li>Premium fully synthetic fluids</li> <li>In-warranty current vehicles, and latest out of warranty</li> <li>Normally up to 6yrs old</li> <li>Top tier specifications</li> </ul>	• ATF 700 HD  • Multi ATF 700		
500	<ul style="list-style-type: none"> <li>Premium part synthetic fluids</li> <li>For older vehicles, normally out of warranty</li> <li>Normally up to 10yrs old</li> <li>Mid-tier specifications</li> </ul>	• ATF 500 HD  • Multi ATF 500		
300	<ul style="list-style-type: none"> <li>Top quality mineral multi-grade oils</li> <li>For older vehicles out of warranty</li> <li>Normally up to 15yrs old</li> <li>Old specifications</li> </ul>	• ATF D3		
100	<ul style="list-style-type: none"> <li>High quality mineral oils</li> <li>For very old vehicles, out of warranty</li> <li>Normally over 15yrs old</li> <li>Very old specifications</li> </ul>	• ATF D2  • ATF TASA		

Protection Longer oil life Fuel economy Long drain interval Longer Transmission Life Smoother Cold Shift Reduced noise							Product Benefit	Approvals and Performance Specifications
								MAN 339 Type V2, Z12; ZF TE-ML 20C; VOITH H55.6336.xx
								MB-Approval 236.9; MAN 339 Type L1, Z2, Z11, V2; Volvo 97341, VOITH H55.6336.xx, ZF TE-ML 09, 14B, 20B DEXRON®-IIH, Allison C-4, Allison TES-389, Allison TES-295, Volvo 97340
								GM Dexron VI; Ford MERCON LV JASO M315-2013 1A-LV, 1A, 2A ; JWS 3309, JWS 3324, JWS 3317
								MAN 339 Type Z1, V1; MB-Approval 236.1 / 236.9; Volvo 97341; VOITH H55.6335.xx; ZF TE-ML 09, 14A, 17C DEXRON®-IIH, Allison TES-389, Allison C-4 (TES-228); Volvo 97340
								GM DEXRON®-VI JASO M315-2013 1A, JASO M315-2013 2A; JWS 3309, JWS 3314, JWS 3317
								JASO M315-2013 1A, JASO M315-2013 2A GM DEXRON®-IIIG/IIH, Allison C-4, Ford Mercon®, Bosch TE-ML 09, ZF TE-ML 09
								GM DEXRON®-IID, Allison C-3
								GM Type "A" Suffix "A"

This table is intended to provide an indicative overview of the product benefits.  
For more detailed benefit descriptions, please visit the individual product pages.



# PETRONAS Tutela Manual Transmission Fluids





Manual Transmission Fluids have quite a job to prevent overheating – but they also have additional challenges caused by the amount of metal-to-metal contact in manual transmissions. Sub-standard oils struggle to combat the wearing of components, and can run out quickly – putting components at risk and reducing overall transmission life.















































PETRONAS Tutela Manual Transmission Fluids extend component life through their enhanced shear stability for constant film strength and anti-wear protection. Not only this, their enhanced thermal and oxidation resistance properties help retain a stable viscosity, optimising transmission efficiency and even contributing towards fuel economy. Our highly engineered MTF products offer extended Oil Drain Intervals to reduce servicing requirements, and protect the transmission system even in the toughest conditions for a smooth drive and easy gear shift.



# PETRONAS Tutela Range

## Manual Transmission Fluids

Performance level	Design principles	Products		
700	<ul style="list-style-type: none"> <li>Premium fully synthetic fluids</li> <li>In-warranty current vehicles, and latest out of warranty</li> <li>Normally up to 6yrs old</li> <li>Top tier specifications</li> </ul>	• Multi MTF 700 75W-80		
		• MTF 700 DM 75W-90		
		• MTF 700 HD 75W-80		
		• Axle 700 EHD 75W-90		
500	<ul style="list-style-type: none"> <li>Premium part synthetic fluids</li> <li>For older vehicles, normally out of warranty</li> <li>Normally up to 10yrs old</li> <li>Mid-tier specifications</li> </ul>	• MTF 500 75W-90		
300	<ul style="list-style-type: none"> <li>Top quality mineral multi-grade oils</li> <li>For older vehicles out of warranty</li> <li>Normally up to 15yrs old</li> <li>Old specifications</li> </ul>	• MTF 300 HD 80W		
		• MTF 300 80W-90		
		• Axle 300 HD 80W-90		

This table is intended to provide an indicative overview of the product benefits.  
For more detailed benefit descriptions, please visit the individual product pages.








Protection Longer oil life Fuel economy Long drain interval Longer Transmission Life Smoother Cold Shift Reduced noise							Approvals and Performance Specifications
							For virtually all modern and older manual transmissions requiring API GL-4 Audi; BMW; Citroën; Ford; GM; Nissan; Peugeot; Land Rover, Honda; Renault; Seat; Skoda; Volvo; VW
							MB-Approval 235.11 API GL-4 MAN 341 Type MB
							MAN 341 Type Z4; Volvo 97307; ZF TE-ML 01L, 02L, 08 API GL-4 DAF; Eaton Europe (300.000km 3 years); Renault Note technique B0032/2 Annex 3
							SAE J2360, API GL-4/GL-5/ MT-1, MIL PRF-2105E Meritor O-76N; MAN 341 Type Z2, 342 Type S1; MB-Approval 235.8; SCANIA STO 2:0A FS; Volvo 97312; ZF TE-ML 02B, 05A, 07A, 12L, 12N, 16B, 16F, 17B, 19C, 21A; DAF; DETROIT DIESEL DFS93K219.01; MACK GO-J; Renault Note technique B0032/2 Annex 3
							API GL-4
							MB-Approval 235.1, ZF TE-ML 08, 17A API GL-4 MAN 341 Type E2
							API GL-4
							MB-Approval 235.6; MAN 342 type M2; Scania STO 1.0; ZF TE- ML 07A, 08, 12L, 12M, 17B, 19B API GL-4/GL-5






 Basic level – most fluids can offer this benefit level.  
 Max level – only few premium fluids can offer this benefit level.



# PETRONAS Tutela Range

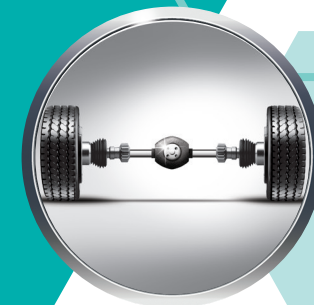
## Manual Transmission Fluids

Performance level	Design principles	Products		
100	<ul style="list-style-type: none"> <li>High quality mineral oils</li> </ul>	• MTF 100 SAE 80		
	<ul style="list-style-type: none"> <li>For very old vehicles, out of warranty</li> </ul>	• 100 EP SAE 90		
	<ul style="list-style-type: none"> <li>Normally over 15yrs old</li> </ul>	• 100 EP SAE 140		
	<ul style="list-style-type: none"> <li>Very old specifications</li> </ul>	• 100 SAE 90		
		• 100 SAE 140		

<div> <div>Protection</div> <div>Longer oil life</div> <div>Fuel economy</div> <div>Long drain interval</div> <div>Longer Transmission Life</div> <div>Smoother Cold Shift</div> <div>Reduced noise</div> </div>						Approvals and Performance Specifications	
							API GL-4
							ZF TE-ML 24A
							API GL-5
							API GL-5
							API GL-4
							API GL-4

This table is intended to provide an indicative overview of the product benefits. For more detailed benefit descriptions, please visit the individual product pages.

 Basic level – most fluids can offer this benefit level.  
 Max level – only few premium fluids can offer this benefit level.











## PETRONAS Tutela Axle Fluids























Axle Fluids have to look after vehicles used in high shock load situations. Failure to protect axle systems can result in axle damage and costly repairs.

PETRONAS Tutela Axle Fluids offer outstanding shock load resistance to protect the axle, particularly in low-speed, high-load scenarios such as those experienced in distribution and construction. Their optimised load-carrying performance and component protection qualities are suitable for axles, differentials and final drives, and they are recommended where recognised industry standards are required.



# PETRONAS Tutela Range

## Axle Fluids

Performance level	Design principles	Products		
700	<ul style="list-style-type: none"> <li>Premium fully synthetic fluids</li> <li>In-warranty current vehicles, and latest out of warranty</li> <li>Normally up to 6yrs old</li> <li>Top tier specifications</li> </ul>	• Axle 700 EHD 75W-90		
		• Axle 700 EHD 75W-140		
500	<ul style="list-style-type: none"> <li>Premium part synthetic fluids</li> <li>For older vehicles, normally out of warranty</li> <li>Normally up to 10yrs old</li> <li>Mid-tier specifications</li> </ul>	• Axle 500 75W-90		
		• Axle 500 LS 75W-90		
















<div> <div>Protection</div> <div>Longer oil life</div> <div>Fuel economy</div> <div>Long drain interval</div> <div>Longer Transmission Life</div> <div>Smoother Cold Shift</div> <div>Reduced noise</div> </div>							Approvals and Performance Specifications
							SAE J2360, API GL-4/GL-5/MT-1, MIL PRF-2105E Meritor O-76N; MAN 341 Type Z2, 342 Type S1; MB-Approval 235.8; SCANIA STO 2:0A FS; Volvo 97312; ZF TE-ML 02B, 05A, 07A, 12L, 12N, 16B, 16F, 17B, 19C, 21A; DAF; DETROIT DIESEL DFS93K219.01; MACK GO-J; Renault Note technique B0032/2 Annex 3
							SAE J2360, API GL-5/MT-1, MIL PRF-2105E Meritor O76M; SCANIA STO 1:0; ZF TE-ML 07A, 12N, 19C; MACK GO-J; Scania High Performance Oil
							API GL-5, MIL PRF-2105D ZF TE-ML 07A, 08
							API GL-5, MIL PRF 2105D

This table is intended to provide an indicative overview of the product benefits. For more detailed benefit descriptions, please visit the individual product pages.






























 Basic level – most fluids can offer this benefit level.  
 Max level – only few premium fluids can offer this benefit level.

# PETRONAS Tutela Range

## Axle Fluids

Performance level	Design principles	Products		
300	<ul style="list-style-type: none"> <li>Top quality mineral multi-grade oils</li> <li>For older vehicles out of warranty</li> <li>Normally up to 15yrs old</li> <li>Old specifications</li> </ul>	• Axle 300 EHD 80W-90		
		• Axle 300 HD 80W-90		
		• Axle 300 EHD 85W-140		
		• Axle 300 80W-90		
		• Axle 300 LS 80W-90		
		• Axle 300 85W-140		
100	<ul style="list-style-type: none"> <li>High quality mineral oils</li> <li>For very old vehicles, out of warranty</li> <li>Normally over 15yrs old</li> <li>Very old specifications</li> </ul>	• 100 EP SAE 90		
		• 100 EP SAE 140		
		• 100 SAE 90		
		• 100 SAE 140		

Protection  
Longer oil life  
Fuel economy  
Long drain interval  
Longer Transmission Life  
Smoother Cold Shift  
Reduced noise

Product Benefit							Approvals and Performance Specifications
							SAE J2360, API GL-5/MT-1 MAN 342 Type M2; Meritor O76D, SCANIA STO 1:0; MIL PRF-2105E, MACK GO-J
							MB-Approval 235.6; MAN 342 type M2; Scania STO 1.0; ZF TE- ML 07A, 08, 12L, 12M, 17B, 19B API GL-4/GL-5
							SAE J2360, API GL-5/MT-1, MIL PRF-2105E Meritor O76A, SCANIA STO 1:0, MACK GO-J
							API GL-5; MIL PRF-2105D MAN 342 Type M1, Type M2; ZF TE-ML 07A, 08, 12E, 17B, 19B, NATO O-226
							API GL-5 ZF TE-ML 05C, 12C
							API GL-5; MIL PRF-2105D ZF TE-ML 07A, 08, 12E
							API GL-5
							API GL-5
							API GL-4
							API GL-4

This table is intended to provide an indicative overview of the product benefits.  
For more detailed benefit descriptions, please visit the individual product pages.



