## Technical Information Fuel & Lubricant Solutions



## **Emgard® MTF 7011**

## Synthetic Manual Transmission Fluid

Material Code 632005001

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Product Description	Emgard MTF 7011 synthetic manual transmission fluid is designed for commercial vehicle automated and manual transmissions and transfer cases which require a non-EP type lubricant.	
Typical Application	Emgard MTF 7011 synthetic manual transmission fluid is recommended for typical commercial vehicle applications such as automated and manual transmissions, transfer cases, and gear boxes. It is formulated to protect transmissions that use synchronizers in high shift duty-cycle applications and have PTO (Power Take Off) options.	
	It is approved for use in the Detroit <sup>™</sup> DT12 <sup>™</sup> transmission and other Mercedes- Benz commercial vehicle transmissions and transfer cases.	
	Mixing with other gear oils should be avoided. In order to fully utilize the product's benefits, a complete oil change is recommended.	
Approvals and Specifications	OEM approvals: MB-Approval 235.11	
Features and Benefits	All-season lubricant, recommended for both extreme hot and cold environments.	
	Designed for protection of the transmission gear train used in heavy service paired with engine downspeeding conditions.	
	Proven additive technology for synchronizer durability and performance.	
	High thermal stability and protection against deposits and varnish.	
	Excellent rust and copper corrosion protection.	

Typical Properties	Property	Unit	Method	Typical Value		
	SAE Viscosity Grade	-	SAE J 300	40		
			SAE J 306	75W-90		
	Viscosity, 100 °C	cSt	ASTM D 445	14.6		
	Viscosity, 40 °C	cSt	ASTM D 445	95.4		
	Viscosity Index	-	ASTM D 2270	159		
	Viscosity, - 40 °C	cP	ASTM D 2983	50,700		
	Pour point	°C	ASTM D 97	-57		
	Flash point	°C	ASTM D 92	237		
	Density 15.6 °C	g/ml (lbs./gal (US))	ASTM D 4052	0.8465 (7.49)		
	Total Acid Number	mg KOH/g	ASTM D 664	1.54		
Handling	Please refer to mate	Please refer to material safety data sheet for details.				
Shelf Life		The product in the original package can be stored for up to 3 years at ambient storage conditions without any deterioration.				
Note	and experience. In and application of o carrying out their ow any guarantee of o for a specific purpo proportions, weight information and do product. It is the re- that any proprietary i	The data contained in this publication are based on our current knowledge and experience. In view of the many factors that may affect processing and application of our product, these data do not relieve processors from carrying out their own investigations and tests; neither do these data imply any guarantee of certain properties, nor the suitability of the product for a specific purpose. Any descriptions, drawings, photographs, data, proportions, weights, etc. given herein may change without prior information and do not constitute the agreed contractual quality of the product. It is the responsibility of the recipient of our products to ensure that any proprietary rights and existing laws and legislation are observed.				
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North America	South America	Asia Pacific	Europe
BASF Corporation	BASF S.A.	BASF East Asia Regional HQ Ltd.	BASF SE
100 Park Avenue Florham Park NJ 07932 USA	Av. das Naçöes Unidas 14171, Morumbi 04794-000 São Paulo, SP Brazil	45/F, Jardin House 1 Connaught Place, Central Hong Kong	Fuel and Lubricant Solutions 67056 Ludwigshafen Germany