

® = registered trademark of BASF SE

# Emgard<sup>®</sup> SAE 50 Synthetic Manual Transmission Lube

## General characterization

Emgard SAE 50 synthetic manual transmission lube is a specially formulated synthetic lubricant designed for extended drain and severe service in heavy duty manual transmissions which require a non EP gear or transmission lubricant. It is specially formulated to protect the higher torque manual transmissions coupled with the increased horsepower engines.

BASF Product Code = 2979

---

## Characteristic values

### Approvals

Emgard SAE 50 synthetic manual transmission lube meets or exceeds all performance requirements for:

- API MT-1
- Eaton Transmission Div., PS-164 rev 7
- Mack Truck, TO-A PLUS
- International Truck, TMS 6816
- Meritor, O-81 (pending)
- ZF Freedomline (ZF-AS Tronic)
- Volvo 97305
- Mack mDrive / Volvo I-Shift (75,000 Miles)

### Performance data

Formulated from a synthetic basestock with a high viscosity index and low pour point, Emgard SAE 50 synthetic manual transmission lube provides superior all-weather, year-round performance. It also contains an anti-wear additive as well as rust, oxidation and corrosion inhibitors that protect bearings and synchronizers, reduce component wear and promote longer transmission and lubricant life.

In addition, the high viscosity index, low pour point and sub-zero fluid flow provide for easier cold weather shifting, less drag and less gear wear because vital transmission parts are lubricated quickly. Since it is highly stable when exposed to severe heat, oxidation and shear conditions, it provides exceptional high temperature lubrication for extended drain intervals. The superior all-season lubricating properties mean less friction and drag in the transmission resulting in a potential for fuel

---

economy. These benefits translate directly into reduced maintenance and replacement parts cost and less downtime.

## Application

**Use** Emgard SAE 50 synthetic manual transmission lube provides:

- All-climate, year-round performance
- Improved component protection
- Extended drain interval
- Potential for fuel economy

Technical application data	Properties	Emgard SAE 50	Test method
	SAE grade	50	SAE J-300
	Viscosity, cSt		ASTM D-445
	100 °C	17.5	ASTM D-445
	40 °C	132	ASTM D-445
	Viscosity, SUS		ASTM D-2161
	210 °F	89.9	ASTM D-2161
	100 °F	678	ASTM D-2161
	Viscosity, cP		ASTM D-2983
	-40 °C	104000	ASTM D-2983
	Viscosity index	146	ASTM D-2270
	Pour point, °C (°F)	< -45 (< -49)	ASTM D-97
	Flash point, °C (°F)	221 (430)	ASTM D-92
	Foam test		ASTM D-892
	Sequence I	pass	ASTM D-892
	Sequence II	pass	ASTM D-892
	Sequence III	pass	ASTM D-892
	API gravity, 15.6/15.6 °C	33.0	ASTM D-287
	Density, g/l, 15.6 °C (lbs./gal., 60 °F)	860 (7.17)	
	Copper strip corrosion		ASTM D-130
	3 hrs., at 100 °C (212 °F)	1a pass	ASTM D-130
	3 hrs., at 121 °C (250 °F)	1a pass	ASTM D-130

\* BASF Product Code: 2979

\*\* BASF Synlubes Technology is certified under ISO 9001 and ISO TS 16949.

## Transportation, handling & storage

### Handling

Please refer to material safety data sheet for details.

### Shelf life

Subject to appropriate storage in closed original containers under the usual storage and temperature conditions, Emgard SAE 50 synthetic manual transmission lube is stable for at least 3 years.

---

## Note

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.

We support worldwide Responsible Care® initiatives. We value the health and safety of our employees, customers, suppliers and neighbors, and the protection of the environment. Our commitment to Responsible Care is integral to conducting our business and operating our facilities in a safe and environmentally responsible fashion, supporting our customers and suppliers in ensuring the safe and environmentally sound handling of our products, and minimizing the impact of our operations on society and the environment during production, storage, transport, use and disposal of our products.

March 2013

North America:  
BASF Corporation  
100 Park Avenue  
Florham Park  
NJ 07932  
USA

South America:  
BASF S/A  
Av. das Nações Unidas 14171,  
Morumbi  
04794-000 Sao Paulo, SP  
Brazil

Asia Pacific:  
BASF East Asia Regional  
Headquarters Ltd.  
45/F, Jardin House,  
1 Connaught Place, Central  
Hong Kong

Europe:  
BASF SE  
Fuel and Lubricant Solutions  
67056 Ludwigshafen  
Germany  
[www.basf.com/lubes](http://www.basf.com/lubes)