

EMGARD[®] SAE 50 SYNTHETIC MANUAL TRANSMISSION LUBE

General Characterization

EMGARD SAE 50 synthetic lubricant 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.

Characteristic values

Quality Control Data

Item	Value	Method
Flash point	$\geq 190,00$ °C	ASTM D 92-97
Pour point/range	$\leq 40,0$ °C	ASTM D 97-96A
Viscosity (kinematic) (100 °C)	17,00 - 18,00 mm ² /s	ASTM D 445-97

Additional specifications are available upon request.

APPROVALS:

EMGARD SAE 50 synthetic manual transmission lubricant 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
- ArvinMeritor 0-81 (pending)
- ZF Freedomline

Performance Data

Advantages

Formulated from a synthetic basestock with a high viscosity index and low pour point, EMGARD SAE 50 lubricant 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 lubricant provides:

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

Technical Application Data

Additional Technical Data

Properties	EMGARD SAE 50	Test Methods
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	104,000	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)	ASTM D-1298
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

*Part Number: 2979

**Cognis SynLubes Technology is certified under ISO 9001 and ISO TS 16949

Transportation, Handling & Storage

Handling

Please refer to material safety data sheet for details.

Shelflife

Subject to appropriate storage in closed original containers under the usual storage and temperature conditions, Emgard SAE 50 Synthetic Transmission Lubricant is stable for at least 3 years.

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Rev. 1.3