



EMGARD EP 75W•90 SYNTHETIC GEAR LUBRICANT

General Characterization

EMGARD EP 75W-90 synthetic gear lubricant is a heavy duty, extreme pressure, API GL-5 axle lubricant. It is compounded using a synthetic basestock, which has a high viscosity index and an exceptionally low pour point. This lubricant contains extreme pressure additives, as well as rust, oxidation and corrosion inhibitors to protect gears and bearings operated under a wide variety of load conditions. The high and low temperature performance of this product exceeds those of conventional SAE 90, 75W-90 and 80W-90 hypoid gear lubricants.

Characteristic values

Quality Control Data

Item	Value	Method
Flash point	> 170 °C	ASTM D 92-97
Viscosity (kinematic) (100 °C)	16,00 - 18,00 mm ² /s	ASTM D 445-97

Additional specifications are available upon request.

APPROVALS:

- API Service Classifications GL-5 and MT-1
- MIL-PRF-2105E / SAE 2360
- ArvinMeritor, O76-N
- Dana Corporation, SHAES 256 Rev C
- Dana Corporation, SHAES 429
- International Truck, TMS 6816
- Mack Truck, GO-J Plus



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Performance Data**Low Temperature Viscosity Comparison of Emgard® 75W-90 vs. Petroleum S0W-90**

	EMGARD® 75W-90	Petroleum-Based S0W-90
Brookfield viscosity, cP		
0DF (-18DC)	7,125	18,350
-20DF (-29DC)	24,500	139,500
-40DF (-40DC)	125,000	2,000,000
Kinematic viscosity, cSt.		
210DF (99DC)	16.7	14.4
250DF (121DC)	9.9	8.9

Application**Use**

EMGARD EP 75W-90 synthetic gear lubricant is recommended for applications where heat and wear present major problems. These applications include manual transmissions where EP type lubricants are recommended, differentials including limited slip, and transfer cases for heavy equipment, trucks, tractors and industrial gear drives. Automobiles, light duty trucks and farm machinery are other potential uses of this lubricant.



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Technical Application Data

Typical Characteristics	EMGARD EP 75W-90	Test Method
SAE Grade	75W-90	J-306
Viscosity, cSt		ASTM D-445
100°C	16.6	
40 °C	122	
Viscosity, SUS		ASTM D-2161
210°F	86.1	
100°F	626	
Viscosity, cP		ASTM D-2983
-18°C (0°F)	7,125	
-40°C (-40°F)	125,000	
Flash Point, °C (°F)	204 (400)	ASTM D-92
Channel Point, °C	< -45	FTMS-3456
Density, g/l, 15.6°C (lbs/gal, 60°F)	891 (7.42)	ASTM D-1298
Foam Test, ml		ASTM D-892
Sequence I	Pass	
Sequence II	Pass	
Sequence III	Pass	
Copper Strip Corrosion		ASTM D-130
3 hrs, at 100°C (212°F)	1a pass	
3 hrs, at 121°C (250°F)	1a pass	
FZG, Load Stage, Pass	12	ASTM D-5182
Thermal Heat Test, 149°C (300°F)	Pass	Rockwell 076E
Timken OK Load	50	ASTM D-2782
*Part Number: 2984		
**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.

Shelf life

Subject to appropriate storage in closed original containers under the usual storage and temperature conditions, Emgard EP 75W-90 is stable for at least 3 years.



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