



EMGARD EP 80W•140 SYNTHETIC GEAR LUBRICANT

## General Characterization

EMGARD 80W-140 synthetic lubricant is a heavy duty, extreme pressure, GL-5 gear 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 80W-90, SAE 90, and 85W-140 hypoid gear lubricants.

## Composition

Proprietary 80W-140 Synthetic Gear Lubricant

## Characteristic values

### Quality Control Data

Item	Value	Method
Flash point	> 180,00 °C	ASTM D 92-97
Viscosity (kinematic) (100 °C)	28,00 - 32,00 mm <sup>2</sup> /s	ASTM D 445-97

Additional specifications are available upon request.

### Approvals:

- API Service Classifications, GL-5 and MT-1
- Dana Corporation, SHAES 429
- Mack Truck, G0-J
- International, TMS 6816
- SAE, J2360/MIL-PRF-2105E
- Arvin Meritor, 0-76-8 (petroleum), 0-80 (synthetic)



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**Performance Data**

Typical Data/Characteristics		Test Method
SAE Grade	80W-140	J-306
Viscosity, cSt		ASTM D-445
100°C	30.6	
40°C	284	
Viscosity, SUS		ASTM D-2161
210°F	149	
100°F	1,470	
Viscosity, cP		ASTM D-2983
0°C (32°F)	---	
-10°C (14°F)	---	
-12°C (10°F)	14,800	
-18°C (0°F)	20,500	
-20°C (-4°F)	---	
-26°C (-15°F)	75,000	
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, Stage, Pass	12	ASTM D-5182
*Part Number: 2831		
**Cognis SynLubes Technology is certified under ISO 9001 and ISO TS 16949		

**Application****Use**

EMGARD 80W-140 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

### Advantages

EMGARD 80W-140 synthetic gear lubricant outperforms conventional gear lubricants to promote longer gear life and better operating economy. Some of the major advantages are:

- \* Increased gear life - These extreme pressure (EP) lubricants result in longer gear life by providing extremely high film strength and superior low temperature performance. They also have anti-rust and anti-corrosion properties to further promote extended gear and bearing life. These lubricants exhibit excellent demulsibility and shear stability.
- \* Better operating performance - As a result of the superior lubricating properties of EMGARD 2831, improved fuel mileage can be realized.
- \* Extended drain, all-season lubrication - with extremely low channel points and high viscosity indices, this lubricant provides excellent performance over a broad temperature range. Further, since it resists oxidation, it will last significantly longer than conventional gear oils.
- \* Reduced maintenance and downtime - all of the foregoing advantages of this lubricant translate directly into reduced maintenance and less downtime.

## Transportation, Handling & Storage

### Handling

Please refer to material safety sheet for details

### Shelf life

Subject to appropriate storage in closed original containers under the usual storage and temperature conditions, EMGARD EP 80W-140 SYNTHETIC GEAR LUBRICANT is stable for at least 3 years.



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