

SUPRA GEAR GL 320

Water-Insoluble Polyalkylene Glycol based Synthetic Lubricants

100% SYNTHETIC BASE

DESCRIPTION

SUPRA GEAR GL are a range of water-insoluble polyalkylene glycol based synthetic lubricants.

BENEFITS

- Outstanding load carrying properties
- Excellent thermal stability
- Excellent corrosion protection (ASTM D665, procedure B pass)
- Outstanding demulsibility characteristics
- Allows thermally stable operation at temperatures in excess of 200 °C

PERFORMANCE DESCRIPTION

Typical applications of **SUPRA GEAR GL** include lubrication of calenders, piston compressors, and bevel, spiral bevel, helical, enclosed spur, and worm gear units.

The lubricants are free of chlorine, sulphur and metal based additives including lead. They remain homogeneous from below their pour point to temperatures in excess of 250 °C.

The anticipated service lifetime of all grades is substantially in excess of 10,000 hours at 100 °C. In industrial enclosed gear units, the performance allows for extended drain intervals and, in some cases, for operation as a "Fill for Life" lubricant.

Compliant with DIN 51517 Part 3, CLP, David Brown Type G

TECHNICAL INFORMATION

NAME	METHOD	SUPRA GEAR GL 320
Density at 20°C (68°F)	ASTM D4052	kg/L
Viscosity at 40°C (104°F)	ASTM D445	325.0 mm²/s
Viscosity at 100°C (212°F)	ASTM D445	44.8 mm²/s
Viscosity Index	ASTM D2270	196.0
Flash point	ASTM D92	225.0 °C
Pour point	ASTM D97	-30.0 °C
4 Ball test	ASTM D2783	170 kg Weld load
FZG Load stage		
TIMKEN Test - Load	ASTM D2782	35.0 lbs
Demulsibility	ASTM D1401	40-40-0 ml oil-water at 82 °C
Foam, Seq I, II, III	ASTM D892	0/0 ml Sequence I / 0/0 ml Sequence II / 0/0 ml Sequence III
Water content	ASTM D1744	<0.05 %
Steel corrosion	ASTM D665 A	no rust Steel finger A+B
Copper Stripe Corrosion	ASTM D130	1B (3 h/ 100 °C)
Air Release	DIN ISO 9120	27 min at 90 °C
Oxidation stability	IP 280	0.523 Total oxidation products
Total Acid Number TAN	ISO 6618	1.12 mg KOH/g

INSTRUCTIONS

SUPRA GEAR GL must not be mixed with mineral or PAO based oils.

When changing from mineral oil to a **SUPRA GEAR GL** fluid, the following procedure should be followed:

- The system should be run until old oil is warm, then drained as fully as possible with particular attention being paid to reservoirs, lines etc., where oil may be trapped. The system should be cleaned of residual sludge.
- Flush the system with the minimum quantity of **SUPRA GEAR GL** by operating under no load, then drain the system whilst the fluid is warm. Repeat if necessary.
- Seals, etc., should be inspected and replaced if deteriorated. Seals previously exposed to mineral oil may shrink when exposed to **SUPRA GEAR GL**, therefore it may be advantageous to replace them. The system can then be filled.
- It is useful to inspect the lubricant after one of two days in use to make sure that it is free of extraneous materials. Contamination with significant quantities of other lubricants can, in some cases, lead to sludging, foaming and other problems.

SERVICES AND EQUIPMENT

In addition to its product ranges, MotulTech can provide tools and services for the maintenance and monitoring of your lubricants. Please contact your technical sales representative for more information.

RECOMMENDATIONS

All information and rules about health, safety and the environment are mentioned on the safety data sheet. It provides information about risks, safety procedures and first aid emergency rules. It clarifies all procedures to implement in the case of an accidental spillage, and for the disposal of the product and its effects on the environment.

Our product contains natural additives which are likely to modify the colour of the concentrates without altering its performance. The specifications of our products are definite only at the time of order, and are subject to our general sale and guarantee conditions. To give our customers the latest technical developments, the general characteristics of our products may vary. The safety data sheet of this product is available at www.motul.com