

## SUPRA GEAR GL 460

Synthetic Gear Oil

### DESCRIPTION

**SUPRA GEAR GL 460** is a water-insoluble polyalkylene glycol based synthetic lubricant.

### APPLICATIONS

Typical applications of **SUPRA GEAR GL 460** include lubrication of calendars, 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.

**SUPRA GEAR GL 460** must not be mixed with mineral or PAO based oils.

**SUPRA GEAR GL 460** meets the following requirements :

- DIN 51517-3
- David Brown Type G lubricant
- Defense standard 05 – 50.1, No. 29

### ADVANTAGES

- 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.

**TECHNICAL INFORMATION**

NAME	UNITS	METHOD	SUPRA GEAR GL 460
Viscosity at 40°C (104°F)	mm <sup>2</sup> /s	ASTM D445	433.0
Viscosity at 100°C (212°F)	mm <sup>2</sup> /s	ASTM D445	63.7
Viscosity Index	-	ASTM D2270	220.0
Flash point	°C	ASTM D92	225.0
Pour point	°C	ASTM D97	-28.0
4 Ball test - Weld load	kg	ASTM D2783	170
Copper Strip Corrosion	-	ASTM D130	1a
Total Acid Number TAN	mg KOH/g	ISO 6618	1.15

These characteristics are given only for information and can be updated over time.

**INSTRUCTIONS**

When changing from mineral oil to **SUPRA GEAR GL 460** 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 460** 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 460**, 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.