

SUPRA GEAR GL

High Performance Lubrication

DESCRIPTION

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

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

PROPERTIES

Properties		Unit	SUPRA GEAR GL 150	SUPRA GEAR GL 220	SUPRA GEAR GL 320	SUPRA GEAR GL 460	Method
Viscosity grade	ISO VG		150	220	320	460	ASTM D-2422
Viscosity, kinematic	at 40 °C	mm ² /s	150	237	325	433	ASTM D-445
	at 100 °C		25.0	31.8	44.8	63.7	
Viscosity index			195	177	196	220	ASTM D-2270
Density	at 20 °C	g/cm ³	0,994	1,006	1,005	1,007	ASTM D-4052
Flash point		°C	191	225	225	225	ASTM D-92
Pour point		°C	-30	-30	-30	-28	ASTM D-97
Total Acid Number	TAN	mg KOH/g	0.9	1.09	1.12	1.15	ISO 6618
Water water content		%	< 0.05	< 0.05	< 0.05	< 0.05	ASTM D-1744
Foam	Sequence 1	ml	0/0	0/0	0/0	90/0	ASTM D-892
	Sequence 2		0/0	0/0	0/0	20/0	
	Sequence 3		0/0	0/0	0/0	0/0	
Air release	at 90 °C	min.	19	17	27	25	DIN ISO 9120
Copper corrosion	3 h/100 °C		1b	1a	1b	1a	ASTM D-130
Steel corrosion	steel finger A+B		no rust	no rust	no rust	no rust	ASTM D-665 A
Demulsibility	oil-water at 82 °C	ml	40-37-3	40-37-3	40-40-0	40-40-0	ASTM D-1401
Oxidation stability	total oxidation products		0.552	0.554	0.523	0.500	IP 280
Timken	OK LOAD	lbs	27	27	35	35	ASTM D-2782
Weld Load	wear test	kg	168	175	170	170	ASTM D-2783
FZG A/8.3/90	Failure Load Stage	FLS	> 13	> 13	> 13	> 13	ASTM D-5182

FIELD OF USE

Typical applications of **SUPRA GEAR GL** 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 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.

APPROVALS

- DIN 51517-3
- David Brown Type G lubricant
- Defense standard 05 – 50.1, No. 29 for GL 150, GL 220 and GL 460

SERVICE AND EQUIPMENT

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

IMPORTANT NOTICE

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