



## FRAGOL GEAR PGS 680 FG

FRAGOL GEAR PGS 680 FG is a synthetic ISO VG 680 high performance gear lubricant based on a mixture of water-soluble poly-alkylene-glycols (PAG). It provides outstanding load-carrying properties and micro pitting resistance required in gear systems.

FRAGOL GEAR PGS 680 FG meets the requirements of FDA 21 CFR 178.3570 and is H1-registered for processes where incidental food contact can occur. All FRAGOL H1-registered products are manufactured according to ISO 21469:2006 which supports producers' HACCP and GMP programs. FRAGOL H1-lubricants do not contain ingredients of animal origin or genetically modified products and are KOSHER and HALAL certified.

### APPLICATIONS

- Worm-, (Bevel) helical-, Planetary-gears
- Medium loaded gears operating at high temperatures
- Gearing for conveyors
- Agitators and mixers
- Extruders – pulpers – presses
- Non-gear applications, e.g. medium loaded bearings, shaft couplings, etc.

### BENEFITS

- Very good load carrying properties
- High wear protection
- High VI
- Water soluble
- Excellent thermal stability
- No deposit/lacquer formation
- Very good shear stability
- Extended drain intervals

### TYPICAL CHARACTERISTICS

FRAGOL GEAR PGS 680 FG	Value	Unit	Method
<b>Temperature range</b>	-25 to 140	°C	-
<b>Appearance</b>	clear to hazy yellowish liquid	-	visual
<b>Viscosity @ 40 °C</b>	680	mm <sup>2</sup> /s	DIN 51562
<b>Viscosity @ 100 °C</b>	122	mm <sup>2</sup> /s	DIN 51562
<b>VI</b>	200	-	DIN ISO 2909
<b>Density @ 20 °C</b>	1.07	kg/l	ISO 23581
<b>Total acid number</b>	+/- 0.5	mg KOH/g	ISO 6618
<b>Flash point (COC)</b>	260	°C	DIN EN ISO 2592
<b>Pour point</b>	-30	°C	DIN ISO 3016
<b>FZG A/8.3/90</b>	> 14	load stage	ISO 14635
<b>FZG A/16.6/90</b>	> 14	load stage	ISO 14635

### SPECIFICATIONS

FRAGOL GEAR PGS 680 FG meets or exceeds the requirements of the following specifications:

DIN 51517-3 CLP

FLENDER approval for worm, helical, bevel and planetary gear units (A+B, rev.13)

### COMPATIBILITY

FRAGOL GEAR PGS 680 FG is not compatible with other chemistries. This chemistry also has the tendency to dissolve single component paints. For the compatibility with seals, gaskets and hoses we recommend to check with the supplier of those materials.

Please check our technical guideline for information about how to convert to PAG-oils.