

# PETRONAS GEAR SYN PGS Series

## Synthetic Gear & Bearing Oil

**GEAR SYN PGS Series** Gear Lubricants are high performance products developed in cooperation with major gear manufacturers, designed primarily for industrial worm gear application, but may also be considered as a general-purpose gear lubricant for critical applications. These fluids are Polyalkylene glycol (PAG) synthetic based fluids that provide excellent thermal and oxidative stability, load carrying ability, and sludge-free performance over an extremely wide temperature range. In addition, these fluids have low foaming tendencies and good rust protection, even in salt-water environs.

### Applications

- Worm gear applications
- General-purpose Gear Lubricant
- Other Applications requiring high temperature resistant lubricant

### Compatibility

Seals: **GEAR SYN PGS** may be used with all common seal materials except leather.

Paints: High quality epoxy or red lead based paints should be used, as the synthetic base-stock tends to soften certain paints.

Flush: When changing over from a conventional mineral oil or grease, care should be taken to minimize contamination by decomposition products from the previous lubricant. Flush with a light mineral oil followed by a light petroleum solvent rinse and air dry.

### Packaging

- 18 Liters pails and 209 Liters drums

### Customer Benefits

- Improved Efficiency:
  - Reduced power input
  - Less friction
  - Lower operating temperature
  - Less power consumption
  - Reduced wear and maintenance
  - Efficient power transmission
- Improved Thermal Stability:
  - Longer service life
  - No sludge formation
  - Negligible viscosity change
- High Viscosity Index:
  - Provides multi- grade viscosity-type performance Lower Pour points
  - Excellent fluidity at low temperature
- Excellent Corrosion Inhibition: Even in the presence of salt water

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## Typical Properties

Characteristics	PGS 150	PGS 220	PGS 320
Viscosity, cSt			
@40°C	132	217	341
@100°C	25	36	57.9
Viscosity Index	223	216	240
Density @15.6°C, Kg/L	1.0-1.1	1.0-1.1	1.0-1.1
Pour Point, °C	-42	-37	-35
Flash Point, C.O.C., °C	270	280	280
Rust Protection (ASTM D-665B)	Pass	Pass	Pass
FZG Gear Test, Final Pass Stage	11	12	12

Characteristics	PGS 460	PGS 680	PGS 1000
Viscosity, cSt			
@40°C	408	688	1117
@100°C	71	118	167
Viscosity Index	253	274	274
Density @15.6°C, Kg/L	1.0-1.1	1.0-1.1	1.0-1.1
Pour Point, °C	-33	-32	-31
Flash Point, C.O.C., °C	280	280	280
Rust Protection (ASTM D-665A)	Pass	Pass	Pass
FZG Gear Test, Final Pass Stage	12	12	12

## Customer Advice

For further assistance on product MSDS, recommendation or technical queries, please liaise with the regional technical services engineer or contact HQ technical engineers.