

PETRONAS GEAR SYN EP SERIES

Extreme Pressure (EP) Synthetic Gear & Bearing Oils

GEAR SYN EP Series extreme pressure synthetic gear oils are a family of products particularly suited to gear applications in which extreme service conditions are expected. They are available in ISO grades 150 through 1000. These products are formulated with polyalphaolefin (PAO) base stocks in order to provide performance greatly superior to conventional petroleum oils. The molecular structure of PAO resembles that of high quality petroleum oils. Indeed, PAO fluids are fully compatible with petroleum based oils while offering significantly improved load carrying ability, excellent wear and rust protection, high viscosity index, high flash point, low pour point, outstanding oxidative stability, and cleaner running systems.

Applications

- Particularly suited to gear applications in which extreme service conditions of heavy loads and high service temperature

Compatibility

No special precautions related to compatibility are required when changing over from a mineral oil lubricant to Petronas synthetic hydrocarbon based lubricant.

Customer Benefits

- Excellent oxidation and thermal stability
- High operating temperature range
- Lower maintenance costs
- Excellent load carrying ability
- Extended lubricant life
- Improved cleanliness
- Compatible with paints, gaskets, and seals used with conventional petroleum based oils
- Compatible with petroleum oils, therefore allowing minimal effort to changeover

Packaging

- 18 Liters pails and 209 Liters drums

Typical Properties

Characteristics	EP 150	EP 220	EP 320	EP 460	EP 680	EP1000
Viscosity, cSt @40°C	145	222	315	457	666	1020
@100°C	19.3	25.9	34.1	45.7	61.2	91
Viscosity Index	154	160	161	163	160	142
Pour Point, °C	-48	-48	-46	-46	-43	-40
Flash Point, C.O.C., °C	260	268	268	271	274	278
Foaming Tendency, ml (Seq. I &II)	0-0	0-0	0-0	0-0	0-0	0-0
Copper Corrosion (24 hrs@100°C)	1b	1b	1b	1b	1b	1b
4-Ball Wear Scar, (1200 rpm, 40 kg, 75° C, 1 hr), mm	0.34	0.31	0.30	0.30	0.30	0.30
4-Ball EP Weld Point, Kg	250	240	225	225	240	240
FZG Gear Test, Pass Stage	13	13	13	13	13	13
Timken OK Load, lbs	>80	>80	>80	>80	>80	>80

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.