



Alphasyn PG Range

Synthetic heavy duty (PAG) EP gear oils

Description

The Castrol Alphasyn PG gear oil range of synthetic lubricants are based on poly alkylene glycol (PAG) fluids enhanced with antioxidants, rust inhibitors and extreme pressure (EP) additives of high thermal stability.

Application

The Alphasyn PG range of gear oils are primarily intended for use in worm reduction gearboxes where the low coefficient of friction of the PAG base fluid improves efficiency and consequently reduces power consumption and operating temperatures. This is particularly important in applications where sliding contact is high. The use of a PAG basestock provides inherently high viscosity index (VI) and low pour points making these products suitable for use over a wide temperature range. Alphasyn PG meets the requirements of most OEM's that allow the use of PAG based gear oils.

Advantages

- Low coefficient of friction reduces energy consumption and lowers operating temperatures, leading to longer oil life.
- Good thermal and oxidative stability provides reliable operation and extended operating life when compared to mineral oil based products.
- Inherently high viscosity index (VI) makes the product suitable for operation over a wide temperature range.
- High load carrying capacity and good antiwear protection reduces maintenance.

Typical Characteristics

Name	Method	Units	Alphasyn PG 150	Alphasyn PG 220	Alphasyn PG 320	Alphasyn PG 460
Density @ 15°C / 59°F	ISO 12185 / ASTM D4052	kg/m ³	1050	1060	1060	1060
Kinematic Viscosity @ 40°C / 104°F	ISO 3104 / ASTM D445	mm ² /s	150	220	320	460
Kinematic Viscosity @ 100°C / 212°F	ISO 3104 / ASTM D445	mm ² /s	28	40	56	80
Viscosity Index	ISO 2909 / ASTM D2270	-	225	235	240	255
Pour Point	ISO 3016 / ASTM D97	°C (°F)	-39 (-38)	-39 (-38)	-36 (-33)	-36 (-33)
Flash Point - closed cup method	ISO 2719 / ASTM D93	°C (°F)	210 (410)	210 (410)	210 (410)	210 (410)
Foam Sequence I - tendency / stability	ISO 6247 / ASTM D892	ml/ml	10/0	10/0	10/0	10/0
Rust test - distilled water (24 hrs)	ISO 7120 / ASTM D665A	Rating	Pass	Pass	Pass	Pass
Timken OK Load test	ASTM D2782	kg (lb)	29.5 (65)	31.8 (70)	36.3 (80)	38.6 (85)
FZG Gear Scuffing test - A/8.3/90	ISO 14635-1	Failure Load Stage	-	-	>12	>12

The above figures are typical of those obtained with normal production tolerance and do not constitute a specification.

Additional Information

Please note that the Castrol Alphasyn PG range of gear lubricants are not compatible with mineral or any other type of synthetic gear lubricants.

Storage

All packages should be stored under cover. Where outside storage is unavoidable drums should be laid horizontally to avoid the possible ingress of water and the obliteration of drum markings. Products should not be stored above 60°C, exposed to hot sun or freezing conditions.

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19 Jun 2018

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