Product Data

Castrol Alphasyn PG

Synthetic gear oils

Description

The Castrol Alphasyn™ PG gear oil range of synthetic lubricants are based on polyalkyleneglycol (PAG) fluids enhanced with antioxidants, rust inhibitors and Extreme Pressure (EP) additives of high thermal stability.

Application

Alphasyn PG gear oils are primarily intended for use in worm reduction gear boxes, 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 base stock 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, this leads 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 VI makes the product suitable for operations over a wide temperature range.
- High load carrying capacity and good wear protection reduces maintenance

Typical Characteristics

Test	Method	Units	150	220	320	460
Density @ 15°C	ISO 12185 / ASTM D4052	g/ml	1.05	1.06	1.06	1.06
K.V. @ 40°C	ISO 3104 / ASTM D445	mm^2/s	150	220	320	460
K.V. @ 100°C	ISO 3104 / ASTM D445	mm^2/s	28	40	56	80
Viscosity Index	ISO 2909 / ASTM 2270	-	225	235	240	255
Pour Point	ISO 3016 / ASTM D97	°C	-39	-39	-36	-36
Flash Point, PMC	ISO 2719 / ASTM D93	°C	210	210	210	210
Foam Seq I	ISO 6247 / ASTM D892	mls	10/0	10/0	10/0	10/0
Rust Test (24 hrs distilled water)	ISO 7210 / ASTM D665A	-	Pass	Pass	Pass	Pass
Timken OK Load	ASTM D2782 / IP 240	lbs	65	70	80	85
FZG fail stage (A8.3/90)	ISO 14635-1 / DIN 51354	-	-	-	>12	>12

Subject to usual manufacturing tolerances.

Additional Information

Normal industrial paints are not compatible with these lubricants. Gearboxes should be left unpainted internally, or alternatively should be painted with two component coatings such as epoxy resins.

Care must be taken that seal materials are compatible with these lubricants. The recommended materials are nitrile rubber (NBR), silicone (VMQ), fluoro-silicone rubber (FMQ), and fluoroelastomers (FKM). Incompatible materials are likely to shrink or swell, thus causing either severe leakage or seizure of the seal.

These products are not miscible with mineral oils.

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