



Alphasyn PG Range

Synthetic industrial EP gear oil

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

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.

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 operating over a wide temperature range.
- High load carrying capacity and good wear protection reduces maintenance.

Typical Characteristics

Name	Method	Units	Alphasyn PG 150	Alphasyn PG 220	Alphasyn PG 320	Alphasyn PG 460
ISO Grade			150	220	320	460
Density @ 15°C	ISO 12185 / ASTM D4052	g/ml	1.05	1.06	1.06	1.06
Viscosity, Kinematic @ 40°C	ISO 3104 / ASTM D445	mm ² /s	150	220	320	460
Viscosity, Kinematic @ 100°C	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	-39	-39	-36	-36
Flash Point, PMC	ISO 2719 / ASTM D93	°C	210	210	210	210
Foam Sequence I	ISO 6247 / ASTM D892	mls/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	IP 240 / ASTM D2782	lbs	65	70	80	85
FZG Load test (A/8.3/90)	ISO 14635-1 / DIN 51354	FLS	-	-	>12	>12

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

User Advice

The Castrol Alphasyn PG products are based on PAG fluids which are not compatible with mineral oils or other synthetic based lubricants. In addition, PAG fluids are not always miscible with other PAG's, hence care needs to be taken when topping up.

Changeover to Castrol Alphasyn PG is therefore preferentially achieved by draining systems and refilling.

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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Castrol Marine, Technology Centre, Whitchurch Hill, Pangbourne, Reading RG8 7QR, United Kingdom

www.castrolmarine.com

