



Product Data

ALPHASYN PG RANGE

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Synthetic Industrial Extreme Pressure Gear Oil

DESCRIPTION

Castrol Alphasyn PG synthetic gear oils are based upon highly stable polyglycol base fluids, the properties of which are further enhanced by a complex additive system giving improvements in load carrying capacity, oxidation and thermal stability, allowing operation at high loads and continuous high temperatures.

APPLICATION

Alphasyn PG gear oils are primarily intended for use in worm reduction gear boxes, where the low coefficient of friction of the polyglycol base fluid gives improvements in efficiency and consequent reductions in power consumption and operating temperatures, particularly when operating at high loads. The stability of the synthetic base when compared to mineral oil also allows increased maintenance intervals and fluid life, reducing servicing costs.

Alphasyn PG gear oils are available in ISO viscosity grades from 150 to 460.

FEATURES

BENEFITS

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| ◆ High load carrying capacity and outstanding wear protection | ◆ Reduced Maintenance |
| ◆ Low coefficient of friction | ◆ Reduced energy consumption and operating temperature |
| ◆ High viscosity index and low Pour Point, Stable at high temperatures (up to 140Deg C) | ◆ Wide operating temperature range and minimise or avoid pre-heating for cold starts |
| ◆ Excellent corrosion protection for gearboxes operating in humid environments | |



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PHYSICAL CHARACTERISTICS

ALPHASYN	PG150	PG220	PG320	PG460
ISO Viscosity Grade	150	220	320	460
Kinematic Viscosity @ 40 Deg C, cSt	150	220	320	460
@ 100 Deg C, cSt	27.8	39.7	55.7	79.5
Viscosity Index	225	235	240	255
Relative Density @ 20 Deg C	1.05	1.06	1.06	1.06
Open Flash Point, Deg C	260	262	268	268
Air Release Value @ 75 DegC mins	12	12	12	12
Pour Point, Deg C	-39	-39	-36	-36
Foam Seq 1 Tendency/Stability, mls	30/Nil	30/Nil	30/Nil	30/Nil
Rust Test, Distilled Water, IP135A	Pass	Pass	Pass	Pass
Copper Corrosion, 3 hrs @ 100Deg C, IP154	1B	1B	1B	1B
4-Ball EP Test Weld Point, kg	225	230	235	240
4-Ball Wear Test 1 hr @ 30kg, mm	0.30	0.28	0.27	0.26
Timken OK Load, lbs	65	70	70	80
FZG Gear Test Failure Load Stage	12+	12+	12+	12+

MATERIALS COMPATIBILITY

Alphasyn PG synthetic oils have different material compatibilities than mineral oils. The following are satisfactory:-

Seals:	Nitrile, Silicone, Neoprene , Viton, Hexafluoropropylene, Silicone Rubber Natural Rubber, Hypalon, Butyl Rubber
Paints recommended:	Epoxy resin based paints

Health and Safety information sheets are available for all Castrol products from the address below:
Castrol (U.K.) Limited, Pipers Way, Swindon, Wiltshire SN3 1RE, England, Telephone:
Orders/Enquiries (08459)645111, Technical Enquiries (01793)452111, Fax (01793)486083

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of any of the products referred to or in the requirements of any specification approval relating to any such products.