

Castrol Alphasyn EP

Synthetic gear oils

Description

The Castrol Alphasyn™ EP gear oil range of high quality synthetic lubricants are based on poly-alphaolefin (PAO) fluids and sulphur/phosphorus Extreme Pressure (EP) additive technology providing good thermal stability and high load carrying capacity.

Application

The Alphasyn EP range have been formulated for use in all types of enclosed gears including heavy and shock-loaded gears and bearings where EP properties are required.

They are suitable for use in gear boxes where micro-pitting resistance is required and for a wide range of applications in extreme environments, for example mining and quarrying, marine applications and paper production.

The use of a PAO base stock provides an inherently high Viscosity Index (VI) and low pour points making these products suitable for use over a wide temperature range.

The Alphasyn EP range is fully compatible with nitrile, silicone and fluropolymer seal materials.

Alphasyn EP is classified as follows:

DIN Classification is CLP

The Alphasyn EP range meets the requirements of:

- DIN 51517 Part 3
- AGMA 9005 - D94
- US Steel 224
- David Brown Type E
- Hansen Transmissions
- Flender
- Lohmann & Stofferfoht

Advantages

- Full EP performance* gives maximum protection of gears against wear and shock loading, including protection against micro-pitting.
- Good thermal and oxidative stability provides reliable operation and extended operating life when compared to mineral oil based products.
- High corrosion protection for gears.
- Inherently high Viscosity Index (VI) makes the product suitable for operations over a wide temperature range.
- Rapid air release and good performance in the Flender Foam Test prevents foaming and bearing damage.
- Good water separation and demulsification characteristics means reduced down time through prolonged lubricant life and increased equipment reliability.
- PAO based lubricant provides good compatibility with seals, paints and mineral oil based lubricants.

* ISO 320 grade achieved FZG >14 rating under A16.6./90 (double speed) test conditions

Typical Characteristics

Test	Method	Units	68	100	150	220	320	460	680
Density @ 15°C	ISO 12185 / ASTM D4052	g/ml	0.86	0.86	0.86	0.86	0.86	0.87	0.87
K.V. @ 40°C	ISO 3104 / ASTM D445	mm ² /s	150	150	150	220	320	460	680
K.V. @ 100°C	ISO 3104 / ASTM D445	mm ² /s	18	18	18	25	33	45	57
Viscosity Index	ISO 2909 / ASTM 2270	-	140	140	140	140	140	140	140
Pour Point	ISO 3016 / ASTM D97	°C	-48	-48	-48	-42	-36	-36	-33
Flash Point, PMC	ISO 2719 / ASTM D92	°C	220	220	220	220	230	230	240
Foam Seq I	ISO 6247 / ASTM D892	mls	0/0	0/0	0/0	0/0	0/0	0/0	0/0
Rust Test (24 hrs synthetic sea water)	ISO / 7210 / ASTM D665B	-	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Timken OK Load	ASTM D2782 / IP 240	Kg/lbs	39/85	39/85	39/85	41/90	41/90	>41/90	>90 lbs
FZG fail stage (A8.3/90)	ISO 14635-1 / DIN 51354	-	-	0	-	-	>14	>14	>14
FZG fail stage (A16.6/90) *	ISO 14635-1 / DIN 51354	-	>12	>12	>12	>12	>12	>12	>12

Subject to usual manufacturing tolerances.

Castrol, Alphasyn EP, and the Castrol logo are trademarks of Castrol Limited, used under licence

This data sheet and the information it contains is believed to be accurate as of the date of printing. However, no warranty or representation, express or implied, is made as to its accuracy or completeness. Data provided is based on standard tests under laboratory conditions and is given as a guide only. Users are advised to ensure that they refer to the latest version of this data sheet.

It is the responsibility of the user to evaluate and use products safely, to assess suitability for the intended application and to comply with all applicable laws and regulations. Material Safety Data Sheets are available for all our products and should be consulted for appropriate information regarding storage, safe handling, and disposal of the product. No responsibility is taken by either BP plc or its subsidiaries for any damage or injury resulting from abnormal use of the material, from any failure to adhere to recommendations, or from hazards inherent in the nature of the material. All products, services and information supplied are provided under our standard conditions of sale. You should consult our local representative if you require any further information.

Castrol Limited, Pipers Way, Swindon, Wiltshire SN3 1RE, UK
www.castrol.com/industrial
www.castrol.com/industrial