

Alphasyn EP

Synthetic gear oils

Description

The Castrol Alphasyn EP gear oil range of high quality synthetic lubricants are based on polyalphaolefin (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 fluoropolymer seal materials.

Specifications

Alphasyn EP is classified as DIN Classification CLP

The Alphasyn EP range meets the requirements of :

- DIN 51517 Part 3
- Siemens MD for Flender Gear Units
- AGMA 9005 – E02
- AIST 224
- David Brown Type E

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.

Typical Characteristics

Test	Method	Units	EP 220	EP 320	EP 460	EP 680
Density @ 15°C	ASTM D4052	kg/m ³	860	860	861	870
Kinematic Viscosity @ 40°C	ASTM D445	mm ² /s	223	326	455	671
Kinematic Viscosity @ 100°C	ASTM D445	mm ² /s	26.4	35.5	46.5	63.4
Viscosity Index	ASTM D2270	-	152	155	159	165
Pour Point	ASTM D97	°C	-51	-45	-48	-36
Flash Point – open cup	ASTM D92	°C	>200	>200	>200	>200
Foam Sequence I - tendency / stability	ASTM D892	ml / ml	Max 75/0	Max 75/0	Max 75/0	Max 75/0
Rust test -synthetic seawater (24 hrs)	ASTM D665B	Rating	Pass	Pass	Pass	Pass

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

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.

Castrol Alphasyn EP

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