



Product Data

Alphasyn T Range

Synthetic gear & hydraulic lubricant

Description

The Castrol Alphasyn™ T gear oil range of synthetic lubricants are based on polyalpha-olefin (PAO) fluids and sulphur/phosphorus antiwear additive technology to provide outstanding thermal stability and good load carrying capacity.

Application

Alphasyn T grades have been formulated for use in most types of light to medium duty enclosed gear systems but should not be used for heavy / shock loaded systems. Alphasyn T is also suitable for the lubrication of bearings and circulatory systems operating at high temperatures and various high temperature applications such as in hydraulic systems and for the lubrication of large, slow moving gears. All products in the Alphasyn T range have very low pour points and excellent viscosity/temperature characteristics, allowing their use in both low and high temperature applications. The Alphasyn T range are fully compatible with nitrile, silicone and fluropolymer seal materials.

Alphasyn T is classified as follows:

DIN Classification CL

Alphasyn T grades meet the requirements of:

- DIN 51517 Part 2
- David Brown Type A

Advantages

- Good thermal and oxidative stability provides reliable operation and extended operating life when compared to mineral oil based products.
- Inherently high viscosity index makes the product suitable for operations operating over a wide temperature range.
- Good antiwear and load carrying abilities minimises gear wear and prolongs gear tooth life.
- Good water separation and demulsification characteristics promote reduced down time through prolonged lubricant life and increased equipment reliability.
- PAO base fluid provides good compatibility with seals, paints and mineral oil based lubricants.

Typical Characteristics

Name	Method	Unit	T 32	T 46	T 68	T 100
Density @ 15°C / 59°F	ISO 12185 / ASTM D4052	kg/m ³	850	850	860	860
Kinematic Viscosity @ 40°C / 104°F	ISO 3104 / ASTM D 445	mm ² /s	32	46	68	100
Kinematic Viscosity @ 100°C / 212°F	ISO 3104 / ASTM D 445	mm ² /s	6.2	7.8	11	14.8
Viscosity Index	ISO 2909 / ASTM D2270	-	120	120	125	130
Pour Point	ISO 3016 / ASTM D97	°C/°F	-57/-71	-57/-71	-57/-71	-51/-60
Flash Point - closed cup method	ISO 2719 / ASTM D93	°C/°F	210/410	220/428	230/446	230/446
Foam Sequence I - tendency / stability	ISO 6247 / ASTM D892	ml/ml	10/0	10/0	10/0	10/0
Rust test - synthetic seawater (24 hrs)	ISO 7120 / ASTM D665B	-	Pass	Pass	Pass	Pass
FZG Gear Scuffing test - A/8.3/90	ISO 14635-1	Failure Load Stage	-	-	10	10

Subject to usual manufacturing tolerances.

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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