



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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