Product Data Sheet

Alphasyn T Range

Synthetic Gear Oil

Description

The Castrol Alphasyn™ T gear oil range of synthetic lubricants is based on polyalphaolefin (PAO) fluids and sulphur/ phosphorus anti-wear additive technology providing outstanding thermal stability and good load carrying capacity.

Application

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

Alphasyn T is classified as follows:
DIN Classification is CL

The Alphasyn T range meets 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 (VI) makes the product suitable for operations operating over a wide temperature range.
- Good anti-wear and load carrying abilities minimises gear wear and prolongs gear tooth life.
- Reduced down time through water separation and demulsification characteristics resulting in prolonged lubricant life and increased equipment reliability.
- PAO based lubricant that provides good compatibility with seals, paints and mineral oil based lubricants.

Typical Characteristics

Name	Method	Unit	T 150	T 220	T 320	T 460
Density @ 15°C	ISO 12185 / ASTM D4052	kg/m³	870	870	870	870
Kinematic Viscosity @ 40°C	ISO 3104 / ASTM D 445	mm²/s	150	220	320	460
Kinematic Viscosity @ 100°C	ISO 3104 / ASTM D 445	mm²/s	17.8	23.9	31.7	41.8
Viscosity Index	ISO 2909 / ASTM D2270	-	131	135	138	141
Pour Point	ISO 3016 / ASTM D97	°C	-42	-42	-30	-30
Flash Point - open cup method	ISO 2592 / ASTM D92	°C	271	277	282	285
Foam Sequence I - tendency / stability	ISO 6247 / ASTM D892	ml/ml	10/0	10/0	10/0	20/0
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	12	12	12	12

Subject to usual manufacturing tolerances.

Castrol NZ (a business division of BP Oil New Zealand Limited)
Technical Advice Line: 0800 10 40 60 / Customer Service: 0800 CASTROL (227 876)
www.castrol.co.nz www.msds.castrol.co.nz