



## Alphasyn T Range

Synthetic gear lubricants

### Description

Castrol Alphasyn T range of synthetic gear lubricants are based on polyalphaolefins (PAO) fluids and sulphur/phosphorus antiwear additive technology, providing 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 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/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.

### 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 over a wide temperature range.
- Good anti-wear and load carrying abilities minimises gear wear and prolongs gear tooth life.
- 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

Name	Method	Units	Alphasyn T 46	Alphasyn T 68	Alphasyn T 100	Alphasyn T 150
ISO Grade			46	68	100	150
Density @ 15°C	ASTM D4052	g/ml	0.85	0.86	0.86	0.87
Viscosity, Kinematic @ 40°C	ASTM D445	cSt	46	68	100	150
Viscosity, Kinematic @ 100°C	ASTM D445	cSt	7.8	11	14.8	17.8
Viscosity Index	ASTM D2270	-	120	125	130	131
Pour Point	ASTM D97	°C	-57	-57	-51	-42
Flash Point, PMC	ASTM D93	°C	220	230	230	230
Foam Sequence I	ASTM D892	mls/mls	10/0	10/0	10/0	10/0
Rust Test, 24 hrs, synthetic sea water	ASTM D665B	-	Pass	Pass	Pass	Pass
FZG Load Test ( A/8.3/90 )	DIN 51354	FLS	-	10	10	12

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

## Additional Information

Alphasyn T is classified as follows:

DIN Classification is CL.

Alphasyn T grades meet the requirements of:

DIN 51517 Part 2.

David Brown Type A.

## 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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30 Sep 2011

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