



## Alphasyn T Range

Synthetic gear oil

### Description

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

### Application

Alphasyn T grades have been formulated for use in bearings, circulatory systems and moderately-loaded gear systems operating at both high and low temperatures. Alphasyn T should not be used for heavy / shock loaded systems.

Alphasyn T is suitable for various applications where a lubricating oil is used under extremes of temperature or variable 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.

### Approval Status

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.

### Features and Benefits

- 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 antiwear and load carrying abilities minimizes 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.

## Technical Data

Name	Method	Units	10	32	46	68	100	150	220	320	460
Density @ 15°C	ASTM D4052	g/ml	0.83	0.85	0.85	0.86	0.86	0.87	0.87	0.87	0.87
Viscosity, Kinematic 40°C	ASTM D445	mm <sup>2</sup> /s	10	32	46	68	100	150	220	320	460
Viscosity, Kinematic 100°C	ASTM D445	mm <sup>2</sup> /s	2.75	5.7	7.5	10.5	14.5	17.8	23.9	31.7	41.8
Viscosity Index	ASTM D2270		120	125	125	128	128	131	135	138	141
Pour Point	ASTM D97	°C	-57	-57	-57	-57	-51	-42	-42	-30	-30
Flash Point, PMCC	ASTM D93	°C	170	210	220	230	230	230	230	230	230
Foam Sequence I, Tendency	ASTM D892	ml	10	10	10	10	10	10	10	10	20
Foam Sequence I, Stability	ASTM D892	ml	0	0	0	0	0	0	0	0	0
Rust Test, Procedure B	ASTM D665	-	Pass	Pass	Pass	Pass	Pass	-	Pass	-	-
FZG Gear Test ( A/8.3/90 )	DIN 51354	FLS	-	-	-	10	10	12	12	12	12

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

## Care and Handling

Avoid prolonged or repeated contact with skin. Wash thoroughly after handling.

## Packaging and 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 600C, exposed to hot sun or freezing conditions.

Alphasyn T Range  
29 Aug 2012

Castrol, the Castrol logo and related marks are trademarks of Castrol Limited, used under licence.

This data sheet and the information it contains is believed to be accurate as of the date of printing. However, no warranty or representation, express or implied, is made as to its accuracy or completeness. Data provided is based on standard tests under laboratory conditions and is given as a guide only. Users are advised to ensure that they refer to the latest version of this data sheet. It is the responsibility of the user to evaluate and use products safely, to assess suitability for the intended application and to comply with all applicable laws and regulations. Material Safety Data Sheets are available for all our products and should be consulted for appropriate information regarding storage, safe handling, and disposal of the product. No responsibility is taken by either BP plc or its subsidiaries for any damage or injury resulting from abnormal use of the material, from any failure to adhere to recommendations, or from hazards inherent in the nature of the material. All products, services and information supplied are provided under our standard conditions of sale. You should consult our local representative if you require any further information.

**Australia** Level 8 (QV1 Building), 250 St. Georges Terrace, Perth WA 6000, Australia. Customer Service Number +61 (0)8 9420 1854

**Dubai** City Tower 2, 6th Floor PO BOX 1699, Sheikh Zayed Road, Dubai, U.A.E. Customer Service Number +971 4 3079304

**Norway** Drammensveien 167, Box 153 Skoyen, 0212 Oslo, Norway. Customer Service Number +47 22 51 12 43

**Singapore** Keppel Bay Towers, 1 Harbourfront Avenue 02-01, Singapore 098632, Singapore. Customer Service Number +65 6371 8478

**United Kingdom** BlueSky Business Space, Westpoint House, Pavilion 2 Prospect Park, Prospect Road, Amhall Business Park, Westhill. AB32 6FJ, UK.  
Customer Service Number +44 (0)1224 766900

**USA** 501 Westlake Park Boulevard, Houston, Texas 77079, USA. Customer Service Number +1 800 339-7157

