

# PRODUCT & TECHNICAL DATA

## ALPHASYN HG Range of Synthetic Gear Lubricants

### DESCRIPTION

Castrol Alphasyn HG synthetic fluids are polyalphaolefin based, synthetic high performance lubricants formulated with specially selected additives to offer a range of fluids for use in both gear and bearing applications. The range has been designed to offer specific performance benefits over its conventional mineral oil and synthetic fluid counterparts.

Particularly suitable for applications operating at high temperatures and loadings, Castrol Alphasyn HG provides superior performance benefits including excellent thermal and oxidation stability and enhanced load carrying ability as detailed below.

### FEATURES/BENEFITS

Castrol Alphasyn HG offers a wide range of performance benefits over a conventional mineral lubricant when used in gear and bearing applications:

- ◆ Substantially extended lubricant life
- ◆ Excellent anti-wear, extreme pressure and load carrying properties leading to savings in both maintenance time and costs
- ◆ Exceptional lubricity properties increase mechanical efficiency and minimise energy losses
- ◆ Proven superior performance across a wide temperature range and in particular at high temperatures
- ◆ Excellent thermal and oxidative stability
- ◆ Advanced lubricant properties such as viscosity characteristics, low pour point and good air and water separation capabilities
- ◆ Fully compatible with standard seal, paint and hose material.
- Fully compatibility with Ortlinghaus multi-plate clutches

Castrol Alphasyn HG synthetic fluids pass the standard FZG test (A/8.3/90) with a fail load stage greater than 12 and also the more severe FZG test (A/16.6/140) at fail load stage 10.

Castrol Alphasyn HG range meets the IP 135B corrosion and ASTM D2893 oxidation tests.

Castrol Alphasyn HG meets the following;  
DIN 51517 pt 3, Industrial gear oil specification

- DIN 51524 pt 2, Industrial hydraulic oil specification.

### APPROVAL STATUS

Castrol Alphasyn HG oils are approved and recommended by major centrifuge manufacturers for gear case lubrication.

Castrol Alphasyn HG oils meet the requirements of major marine gearbox manufacturers, including the Ortlinghaus clutch test.

**TECHNICAL DATA**

<b>Typical Characteristics</b>	<b>Alphasyn HG</b>			
	<b>100</b>	<b>150</b>	<b>220</b>	<b>320</b>
Density @ 15°C, kg/ltr	0.845	0.850	0.862	0.862
Viscosity @ 40°C, cSt	100	150	220	320
Viscosity @ 100°C, cSt	14.3	19.8	26.7	34.6
Viscosity Index	150	150	150	150
Neutralisation Number	1.5	1.5	1.5	1.5
Flash Point COC, °C	270	270	270	286
Flash Point, PMCC, °C	240	240	240	244
Pour Point, °C	-51	-42	-42	-36
Oxidation (KV100 inc'), ASTM D2893	<1%	<1%	<1%	<1%
Steel Corrosion, IP 135B	Pass	Pass	Pass	Pass
FZG A/16.6/140, Load Stage	10	10	10	10
FZG A/8.3/90, Load Stage	>12	>12	>12	>12
Copper corrosion	1a	1a	1a	1a