



Product Data

Alphasyn HG

Synthetic gear lubricants

Description

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.

Application

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

Advantages

Alphasyn HG offers a wide range of performance benefits over a conventional 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, and with Ortlinghaus multi-plate clutches.

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.

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

Alphasyn HG meets the following;

- DIN 51517 pt 3, Industrial gear oil specification.
- DIN 51524 pt 2, Industrial hydraulic oil specification.

Product Performance Claims

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

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

Typical Characteristics

Name	Method	Units	Alphasyn HG 100	Alphasyn HG 150	Alphasyn HG 220	Alphasyn HG 320
ISO Grade			100	150	220	320
Density @ 15°C	ASTM D4052	g/ml	0.84	0.84	0.85	0.86
Viscosity @ 40°C	ASTM D445	cSt	100	150	220	320
Viscosity @ 100°C	ASTM D445	cSt	14.3	19.8	26.7	34.6
Viscosity Index	ASTM D2270	-	140	145	150	150
Flash Point, COC	ASTM D92	°C	270	270	270	286
Flash Point, PMCC	ASTM D93	°C	230	230	230	230
Pour Point	ASTM D97	°C	-51	-42	-42	-36
Oxidation (KV100 inc`)	ASTM D2893	-	<1%	<1%	<1%	<1%
Steel Corrosion	IP 135B	-	Pass	Pass	Pass	Pass
FZG Gear Failure Load Stage (A/16.6/140)	DIN 51354	-	10	10	10	10
FZG Gear Failure Load Stage (A/8.3/90)	DIN 51354	-	>12	>12	>12	>12
Copper Corrosion	IP 154	-	1a	1a	1a	1a

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.

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 60C, exposed to hot sun or freezing conditions.

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