



Alphasyn HG Range

Synthetic gear lubricants

Description

The Alphasyn HG Range of 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 Range provides superior performance benefits including excellent thermal and oxidation stability and enhanced load carrying ability as detailed below.

Features / Benefits

- Alphasyn HG Range 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 particularly 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 Range 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.

Approval Status

Alphasyn HG Range oils are approved and recommended by major centrifuge manufacturers for gear case lubrication. Alphasyn HG Range oils meet the requirements of major marine gearbox manufacturers, including the Ortlinghaus clutch test.

Technical Data

Name	Method	Units	Alphasyn HG 220	Alphasyn HG 320
Density @ 15C	ASTM D4052	g/ml	0.85	0.86
Appearance	Visual	-	Clear & Bright	Clear & Bright
Viscosity, Kinematic 40C	ASTM D445	mm ² /s	220	320
Viscosity Index	ASTM D2270	None	150	150
Pour Point	ASTM D97	°C	-42	-36
Flash Point, PMCC	ASTM D93	°C	230	230
Demulsification 82°C, mins to 40/37/3	ASTM D1401	minutes	20	20
Flash Point, COC	ASTM D92	°C	270	286
Air Release Value @ 90C	IP 313	minutes	4	4.5
Copper Corrosion, 3hrs @ 100C	ASTM D130	-	1B	1B
Rust Test, Procedure B	ASTM D665	-	Pass	Pass
Four Ball Wear	IP 239	mm Scar	0.36	0.36
FZG Gear Failure Load Stage (A/8.3/90)	DIN 51354	-	>12	>12
FZG Gear Failure Load Stage (A/16.6/90)	DIN 51354	-	12	12
FZG Gear Failure Load Stage (A/16.6/140)	DIN 51354	-	10	10
FZG Micropitting Resistance	FVA 54/1	Pass/Fail	9 Medium	9 Medium
Viscosity, Kinematic 100C	ASTM D445	mm ² /s	26.7	34.6
Acid Number, Total (Potentiometric)	ASTM D664	mg KOH/g	1.48	1.48
Ash, Sulphated	ASTM D874	% wt	0.2	0.2

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 60C, exposed to hot sun or freezing conditions.

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