

Monogear

Synthetic lubricant for gearboxes

Description

PROLAB's MONOGEAR is a uniquely formulated EP synthetic oil for gearboxes with a PAO base and PROLAB's antifriction treatment providing it with exceptional properties which allow it to outclass similar products.

Characteristics and Benefits

PROLAB's MONOGEAR synthetic oil for gearboxes is the result of an innovative formulation which contains a unique antifriction treatment as well as superior quality adherent polymers to ensure longer-lasting efficiency as well as second-to-none reliability under heavy loads and extreme working conditions.

MONOGEAR protects gears against wear caused by friction by covering metal surfaces of bearings, pinions and crankcases with a lubricant coating thus providing power transfer integrity, a much smoother operating mode and greater reliability and efficiency by accelerating the progression speed of the lubricant through gears at start-up time.

PROLAB's PAO based MONOGEAR has built-in superior anti-foaming properties and offers maximum protection against oxidation and corrosion. It is available in 5 ISO grades: 150, 220, 320, 460 and 680.

Normes

Monogear series meet and surpass the following normes:

- SAE J2360
- MIL-PRF-2105E
- API MT-1
- API GL-5
- Mack GO-J
- Scania STO 1:0
- ZF TE-ML 05A, 07A, 16B/C/D, 17B, 19B
- Arvin Meritor 0-76-A/B/D
- DAF (where GL-5 axle lubricants are recommended for use)
- IVECO (WHERE MIL-PRF-2105E AXLE LUBRICANTS ARE RECOMMENDED FOR USE)
- Renault (where GL-5 or MIL-PRF-2105E axle lubricants are recommended for use)
- MAN 342 M-2

Types of Application

Use PROLAB's MONOGEAR synthetic oil in all types of gearboxes working with heavy loads.

Compatibilities

PROLAB's MONOGEAR is compatible with elastomeric seals.

Directions for Use

Follow the manufacturer's instructions for the lubrication of the specific piece of equipment.

Notes

For better results, it is highly recommended to use PROLAB's DE-25 Decontaminant prior to using a new lubricant.

Warning

The MONOGEAR synthetic oil for gearboxes can be incompatible with some yellow metals (copper-zinc alloy, copper, etc.) depending on operating temperatures.

Do not hesitate to consult your PROLAB representative.

Available Sizes

4 L, 20 L, 55 L, 205 L

Product Code

406: MONOGEAR # 150

536: MONOGEAR # 220

535: MONOGEAR # 320

534: MONOGEAR # 460

533: MONOGEAR # 680

Characteristics	ASTM test	Typical Values Monogear 150	Typical Values Monogear 220	Typical Values Monogear 320
Flash Point	D92	226°C	226°C	224°C
Fire Point	D92	238°C	232°C	246°C
Pour Point	D97	-30°C	-22°C	-13°C
Specific Gravity at 15°C	D4052	0,89 g/cm ³	0,89 g/cm ³	0,89 g/cm ³

Viscosity at 40°C	D445	146cSt	222 cSt	334 cSt
Viscosity at 100°C	D445	16 cSt	21 cSt	28 cSt
Viscosity Index	D2270	110	110	110
Rust Preventive				
- Distilled Water	D665	Pass	Pass	Pass
- Sea Water		Pass	Pass	Pass
Foaming Stability				
- Sequence #1	D892	0/0 ml	10/0 ml	20/0 ml
- Sequence #2		10/0 ml	0/0 ml	0/0 ml
- Sequence #3		0/0 ml	10/0 ml	10/0 ml
Demulsibility				
- Water in Oil	D2711B	0,6 %	0,8 %	1,2 %
- Total Free Water		83 ml	86 ml	84 ml
- Emulsion		0 ml	trace	0 ml
Dielectric Breakdown	D877	32 Kv	n.d.	n.d.
4-Ball Wear	D4172	0,35 mm	0,32 mm	0,29 mm
4-Ball Wear EP	D2783			
- Load Wear Index		74	80	80

- Weld Load		400 kg	400 kg	400 kg
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Characteristics	ASTM test	Typical Values Monogear 460	Typical Values monogear 680
Flash Point	D92	236°C	228°C
Fire Point	D92	246°C	240°C
Pour Point	D97	-12°C	-13°C
Specific gravity at 15°C	D4052	0,90 g/cm ³	0,90 g/cm ³
Viscosity at 40°C	D445	440 cSt	622 cSt
Viscosity at 100°C	D445	34 cSt	49 cSt
Viscosity Index	D2270	113	134
Rust Preventive			
- Distilled Water	D665	Pass	Pass
- Sea Water		Pass	Pass
Foaming Stability			
- Sequence #1	D892	0/0 ml	0/0 ml
- Sequence #2		00/0 ml	10/0 ml
- Sequence #3		0/0 ml	/0 ml
Demulsibility	D2711B		

- Water in Oil		1,2 %	1,2 %
- Total Free Water		85 ml	82 ml
- Emulsion		0 ml	0,6 ml
Dielectric Breakdown	D877	n.d.	n.d.
4-Ball Wear	D4172	0,30 mm	0,31 mm
4-Ball Wear EP			
- Load Wear Index	D2783	83	85
- Weld Load		400 kg	400 kg

ENSURE YOU HAVE THE MOST UP-TO-DATE INFORMATION BY REGULARLY VISITING THE PRODUCT PAGE ON OUR WEBSITE TO ACCESS THE LATEST VERSION OF THIS TECHNICAL DATA SHEET.

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