



PRODUCT DATA SHEET



EKO GEARLUB F

Premium performance industrial gear oil

DESCRIPTION

The EKO GEARLUB F series includes premium performance mineral lubricants which meet the most demanding specifications of industrial gear oils, including the specifications of the steel industry.

SPECIFICATIONS

DIN 51517 Part 3 CLP, ISO 12925-1 (CKD), AGMA 9005-E02 (EP), SIEMENS Revision 15 for FLENDER gear units, David Brown S1.53.101 (E), AIST 224, Japanese National Specification JIS K 2219: 2006 (Class 2).

Meets key requirements of Chinese Specification GB-5903 2011 and SEB 181226.

APPLICATIONS

- Parallel, helical and bevel gears in closed gearboxes operating in heavy-duty industrial applications.
- Gear units operating under heavy and shock-load conditions.
- Closed gearboxes operating in marine applications.
- Circulating oil or splash feed lubrication systems operating at oil temperatures of up to 100°C.

ADVANTAGES

- Excellent protection against micropitting.
- Excellent phosphorous retention throughout the lubricant lifespan, ensuring extended wear protection.
- Minimizes deposit formation, maintaining gearbox cleanliness at high temperatures.
- Optimal anti-corrosion protection.
- Performance exceeding the requirements of all major industrial gear oil manufacturers.
- Excellent compatibility with seals in static and dynamic seal tests.



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TYPICAL CHARACTERISTICS

Properties	Methods	Units	EKO GEARLUB F 68	EKO GEARLUB F 100	EKO GEARLUB F 150	EKO GEARLUB F 220
ISO Viscosity Grade	-	-	68	100	150	220
Density at 15°C	ASTM D4052	g/ml	0.88	0.88	0.89	0.89
Kinematic viscosity at 40°C	ASTM D445	cSt	66.4	101.4	145,6	210,6
Viscosity index (VI)	ASTM D2270	-	100	97	96	97
Pour Point	ASTM D5950	°C	-27	-24	-24	-24
Foaming characteristics, Tendency/Stability Sequence I,II,III	ASTM D892	ml	0/0	0/0	0/0	0/0
Flash Point	ASTM D92	°C	230	234	242	246
Copper Corrosion	ASTM D130	-	1a	1a	1a	1a
Rust-preventing Characteristics	ASTM D664A/B	-	Pass/Pass	Pass/Pass	Pass/Pass	Pass/Pass
FZG Scuffing Load Test						
A/8.3/90	ISO 14635-1	Fail Stage	12+	12+	12+	12+
A/16.6/90				12+	12+	12+
FZG Micropitting test at 90°C, Damage load stage	FVA54/7	Stage/Rating	>10/High	>10/High	>10/High	>10/High
FAG FE 8 wear test Roller wear	DIN 51819-3	mg	1	1	1	1
TIMKEN Load arm test	ASTM D2782	lb	85	95	95	95
4-Ball EP test, Load wear index Weld load	ASTM D2783	Kgf kg	46 250	53 250	54 250	54 250



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TYPICAL CHARACTERISTICS

Properties	Methods	Units	EKO GEARLUB F 320	EKO GEARLUB F 460	EKO GEARLUB F 680
ISO Viscosity Grade	-	-	320	460	680
Density at 15°C	ASTM D4052	g/ml	0.90	0.91	0.92
Kinematic viscosity at 40°C	ASTM D445	cSt	317.5	458.5	689.9
Viscosity Index (VI)	ASTM D2270	-	98	97	87
Pour Point	ASTM D5950	°C	-21	-18	-15
Foaming characteristics, Tendency/ Stability Sequence I,II,III	ASTM D892	ml	0/0	0/0	0/0
Flash Point	ASTM D92	°C	248	252	256
Copper Corrosion	ASTM D130	-	1a	1a	1a
Rust-preventing Characteristics	ASTM D664A/B	-	Pass/Pass	Pass/Pass	Pass/Pass
FZG Scuffing Load Test A/8.3/90 A/16.6/90	ISO 14635-1	Fail Stage	12+ 12+	12+ 12+	12+ 12+
FZG Micropitting test at 90°C, Damage load stage	FVA54/7	Stage/Rat ing	>10/High	>10/High	>10/High
FAG FE 8 wear test Roller wear	DIN 51819-3	mg	1	1	1
TIMKEN Load arm test	ASTM D2782	lb	96	96	97
4-Ball EP test, Load wear index Weld point	ASTM D2783	Kgf kg	54 250	55 250	55 250

HEALTH AND SAFETY

Protect the environment while disposing of used product. Used lubricants should be collected at specific points to ensure they do not pollute the environment. Do not mix with solvents, brake fluids, antifreeze fluids and water, to allow for proper handling.

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This data sheet provides basic information on the product as at the date of drafting. For further information regarding applications, please contact EKO ABEE Technical Support, tel. +30 210 5509 511 and +30 210 7725 418. Advice on safe handling is provided in the Safety Data Sheet