

Machine Oil

ISO 68, 100, 150, 220, 320, 460, 680 & 1000

Product Description

Anglomoil Machine Oil lubricants are mild extreme pressure gear oils, made from high viscosity index base oils incorporating sulphur phosphorus additives. The selected formulation is especially effective for the heavy sliding loads encountered in industrial gearboxes and industrial worm gear boxes.

The additive treatment is compatible with typical gear and bearing metals and provides excellent extreme pressure performance and resistance to oxidation, rusting and foaming.

Anglomoil Machine Oil has shown very good field performance and the oils meet the requirements of US Steel specification 224, American Gear Manufacturers Association (AGMA) 250.04, David Brown Gear Industries ET33/80 and the German DIN 51354 Part 2 specification and DIN 51517 Part 3 (CLP).

Additional Information

Use in all types of industrial and mobile equipment requiring mild EP lubricants. Most suitable for worm drive gearboxes (e.g. Sonnerdale, Borg Warner, David Brown, SEW), and all other types of industrial gearboxes. Use also for chain cases, sprockets, slide guides, flexible couplings and plain and rolling element bearings.

Suitable for bath, splash, circulation and spray application.

Many machines, especially older design processing machinery, are fitted with a 'total loss' lubricating system, i.e. the oil passes only once through the bearing zones before being rejected. With these systems, oil feed to the bearings is sparse and intermittent. Those Machine Oils identified with a suffix 'T', contain an additional additive, a tacky agent, which helps to retain the oil in the bearing zone and to reduce oil consumption. These tacky oils are especially recommended for machines such as presses, stamping machines, rollers, crushers, linear guides and heavily loaded chains and meets the requirements of DIN 51502 (CGLP) as well as DIN 51517 Part 3 (CLP).

Anglomoil Machine Oils are available in the standard international viscosity grades i.e. 68, 100, 150, 220, 320,460, 680 & 1000.

Typical Characteristics - See page 2 and page 3

Typical Characteristics

Test	Method	Units	M/O 68	M/O 100	M/O 150	M/O 220	M/O 320	M/O 460	M/O 680	M/O 1000	Parameters
AGMA No.			2	3	4	5	6	7	8	8A	
ISO Grade	ISO 3448		68	100	150	220	320	460	680	1000	
Density @ 20 °C	ISO 12185 ASTM D4052	g/ml	0.866	0.867	0.881	0.884	0.886	0.895	0.899	0.902	Typical Values
Viscosity @ 40°C	ASTM D445	CPs	67.97	98.19	150.89	217.57	319.61	452.81	675	1025	Typical Values
Viscosity @ 100°C	ASTM D445	CPs	8.97	11.69	15.19	19.51	25.24	31.34	42.73	58.4	Typical Values
Viscosity Index	ASTM 2270		106.2	107.7	101.2	101.9	101.9	99.7	105.7	110.9	Typical Vales
Pour Point	ASTM D97	°C	-21	-21	-18	-18	-15	-12	-9	-5	Typical Values
Flash Point COC	ASTM D92	°C	215	219	223	225	226	227	229	230	Typical Values
Flash Point PMCC	ASTM D93	°C	220	220	220	226	226	226	230	230	Typical Values
FOAM Seq 1	ASTM D892	m/l	10/0	10/0	10/0	10/0	10/0	10/0	10/0	10/0	50/0 (<15% Foam)
FOAM Seq 2	ASTM D892	m/l	10/0	10/0	10/0	10/0	10/0	10/0	10/0	10/0	50/0
FOAM Seq 3	ASTM D892	m/l	10/0	10/0	10/0	10/0	10/0	10/0	10/0	10/0	50/0
Copper Corrosion 3hrs/100 C	ASTM D130		1a	1a	1a	1a	1a	1a	1a	1a	
Rust Test: 24hrs distilled water	ASTM D665		Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	
synthetic seawater			Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	
Timken OK Load		Kg/lb	34/75	34/75	34/75	34/75	34/75	34/75	34/75	34/75	
FZG Fail Stage	DIN 51534		>12	>12	>12	>12	>12	>12	>12	>12	12 Stage Pass
4 – Ball EP Weld Point LWI	US Steel 214 ASTM D2783	Kg KG	>250 47	>250 47	>250 47	>250 47	>250 47	>250 47	>250 47	>250 47	250 45

Typical Characteristics Continued

Test	Method	Units	M/O 68	M/O 100	M/O 150	M/O 220	M/O 320	M/O 460	M/O 680	M/O 1000	Parameters
Demulsibility											
Free Water	ASTM D2711	m/l	83	83	83	83	83	83	83	83	80 min
Water in Oil	AGMA 9005-E02	%	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	2 max
Emulsion	ISO 220	m/l	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1 max
Oxidation Stability 121C/312 hrs											
Vis. No.	ASTM 2893		3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	6%
Precipitation No.	5-200		None	None	None	None	None	None	None	None	
Thermal Stability Procedure B											
%Vis. Change	Cincinnati P-74		1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	5 max
Sludge		Mg/100ml	None	None	None	None	None	None	None	None	None
Steel Appearance			1	1	1	1	1	1	1	1	1.5 max
Deposit		200ml/mg	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1.5 max
Metal Removed		200ml/mg	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	3.5 max
Copper Appearance			4	4	4	4	4	4	4	4	5 max
Deposit		200ml/mg	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	6 max
Metal Removed		200ml/mg	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	5 max
FAG FE-8 Bearing Test											
Roller Weight Loss	DIN51819- 3	Mg	2	2	2	2	2	2	2	2	30 max
Cage Weight Loss	DIN 51517-3	Mg	102	102	102	102	102	102	102	102	200
Seal Compatibility (SRE-NBR28)											
Vol. Change	DIN 53538-3	%	3	3	3	3	3	3	3	3	0 to 10
Hardness Change	DIN 51517-3	pts	-1	-1	-1	-1	-1	-1	-1	-1	-10 to +5
Tensile Change			8	8	8	8	8	8	8	8	30
Elongation Rupture		%	21	21	21	21	21	21	21	21	40
EP Lubricant	API GL3 DIN51517- 3		Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Part 3 CLP

Master Item# 2061, 2047, 2049, 2053, 2057, 2059, 2063 & 2064

Pack Size Availability: 20L, 200L, IBC=1000L

Last Updated: 10th March 2021