



## Castrol Alpha BMB Range

CLPF Type Gear Oils

### Description

The Castrol Alpha™ BMB series are high-performance gear oils containing solid lubricant additive (Molybdenum Disulphide). They fulfill the requirements of the DIN 51517-3 specification and qualify as 'CLPF type' gear oils in accordance with DIN 51502 requirements. The Molybdenum Disulphide additive is carefully selected to be compatible with the base oils and other additives, ensuring that a stable suspension can be achieved to deliver the highest load-carrying efficiency over a broad load range.

The Alpha™ BMB series of gear oils are compatible with non-ferrous metals and commonly used seal materials. They also deliver a high thermal loading capacity, good ageing stability and excellent protection against corrosion.

## Typical Characteristics

Name	Method	Units	100	220	320	460	680	1200
Colour	Visual	-	Black	Black	Black	Black	Black	Black
Density @ 15°C / 59°F	ISO 12185 / ASTM D4052	kg/m <sup>3</sup>	887	893	895	898	902	917
Viscosity Index	ISO 2909 / ASTM D2270	-	93	90	94	95	94	101
Kinematic Viscosity @ 40°C / 104°F	ISO 3104 / ASTM D445	mm <sup>2</sup> /s	99.1	220	320	457	681	1198
Kinematic Viscosity @ 100°C / 212°F	ISO 3104 / ASTM D445	mm <sup>2</sup> /s	10.9	19	23.8	30.3	38.7	59.6
Flash Point - open cup method	ISO 2592 / ASTM D92	°C/°F	226 / 439	230 / 446	268 / 514	270 / 518	284 / 543	260 / 500
Pour Point	ISO 3016 / ASTM D97	°C/°F	-27 / -17	-24 / -11	-12 / 10	-9 / 16	-6 / 21	-9 / 16
Acid number	ISO 6618 / ASTM D974	mgKOH/g	0.32	0.32	0.32	0.32	0.32	0.32
Oxide Ash content	ISO 6244 / ASTM D482	% wt	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Sludging and Corrosion - TOST 1000 hour	ASTM D4310	TAN increase (mg KOH/g)	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Rust test - distilled water (24 hrs)	ISO 7120 / ASTM D665A	Rating	0-A	0-A	0-A	0-A	0-A	0-A
Copper corrosion (24 hrs @ 100°C / 212°F)	ISO 2160 / ASTM D130	Rating	1-100 A 3	1-100 A 3	1-100 A 3	1-100 A 3	1-100 A 3	1-100 A 3
FZG Gear Scuffing test - A/8.3/90	ISO 14635-1	Failure Load Stage	>12	>12	>12	>12	>12	>12
FZG Gear Scuffing test - A/16.6/140	ISO 14635-1 (modified)	Failure Load Stage	>12	>12	>12	>12	>12	>12
Foam Sequence I - tendency / stability	ISO 6247 / ASTM D892	ml/ml	<50/0	<50/0	<50/0	<50/0	<50/0	<50/0

Subject to usual manufacturing tolerances.

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