Castrol Industrie GmbH
Performance Lubrication

Product Data Sheet

OPTIMOL OPTIGEAR® BM

High performance gear oils based on mineral oil with MICROFLUX TRANS®, the load-active additive combination

DESCRIPTION

OPTIMOL OPTIGEAR® BM are solid-free high performance gear oils.
Wear problems such as abrasion, surface fatigue (pitting), grey staining or problems during the running-in phase are solved. Compatible with non-ferrous metals.
The additive combination MICROFLUX TRANS® adjusts itself to changing loads and actively prevents wear.
OPTIMOL OPTIGEAR® BM gear oils are in conformity with and even exceed the requirements of DIN 51517 part 3 CLP.

APPLICATIONS

- Long-term lubrication under the most extreme mechanical conditions, vibrations and elevated temperatures
- Spur and bevel gears, worm gears up to the medium load range
- All types of rolling and sliding bearings
- Gear-tooth couplings and joints
- Highly loaded sliding surfaces
- Circulation systems

ADVANTAGES

- extraordinary load carrying capacity
- optimum wear protection up to the highest load ranges
- maximum reliability against grey staining
- reduction of the coefficient of friction and temperature
- improvement of surfaces - even when damaged - by micro-smoothing effect
- significantly shorter running-in period
- high corrosion protection
- free from solids - due to oil-soluble additive combination
- extended oil change intervals even under extreme conditions
- longer service life of gears
- reduced energy, maintenance and disposal costs

NOTES FOR USE

- Miscible and compatible with unleaded gear oils based on mineral oil. However, maximum performance is only guaranteed if not mixed with any other product.
- Compatible with non-ferrous metals.
- Compatible with paints and conventional sealing materials.
- Mechanical cleaning with all known filtering installations and separators possible.

MÖNCHENGLADBACH
Erkelenzer Straße 20
D-41179 Mönchengladbach
Tel.: +49 (0) 21 61 9 09-30
Fax: + 49 (0) 21 61 9 09-400

OPTIMOL OPTIGEAR® BM

Technical data

	Unit	Value											Test method
OPTIMOL OPTIGEAR® BM	**-**	**68**	**100**	**150**	**220**	**320**	**460**	**680**	**1000**	**1500**	**3000**	**5000**	**-**
Article no.	-	05220	05200	05218	05202	05204	05206	05208	05212	05213	05214	05222	-
Color	-	brown											visual
Base	-	mineral oil											-
ISO viscosity group	-	68	100	150	220	320	460	680	1000	1500	3000	5000	-
Density at + 15°C/ + 59°F	kg/m³	900	893	897	905	915	920	930	930	930	920	922	DIN 51757
Kin. viscosity at + 40°C/+ 104°F at + 100°C/+ 212°F	mm²/s	64.00 8.30	105.0 11.5	150.0 14.5	233.5 18.7	338.5 24.0	490.0 30.2	680 37.0	995 49.0	1507 75.6	2900 122.5	4456 167.1	DIN 51562
Viscosity index	-	103	100	98	92	92	92	92	93	112	120	126	DIN ISO 2909
Pour point	°C °F	- 24 - 11.2	- 21 - 5.8	- 18 - 0.4	- 15 5.0	- 15 5.0	- 12 10.4	- 9 15.8	- 9 15.8	- 3 26.6	0 32.0	- 6 21.2	DIN ISO 3016
Flash point	°C °F	220 428	230 446	230 446	235 455	240 464	240 464	250 482	260 500	> 240 > 464	260 500	228 442.4	DIN ISO 2592
Copper corrosion protection	-	1a	1a	1a	1a	1a	1a	1a	1a	1a	1a	1b	ASTM D-130
Steel corrosion protection	-	0 - A	0 - A	0 - A	0 - A	0 - A	0 - A	0 - A	0 - A	0 - A	0 - A	0 - A	DIN 51355
FZG test (8.3/90) Damage load stage	-	←					> 12			→			DIN 51354 T.2
SRV® test run - test mode 5ae: Wear scar diameter min. friction coefficient µ max. friction coefficient µ	 mm - -	 0.55 0.060 0.080	 0.55 0.060 0.080	 0.55 0.060 0.080	 0.55 0.060 0.080	 0.55 0.060 0.080	 0.55 0.060 0.080	 0.55 0.060 0.080	 0.55 0.060 0.080	 0.52 0.065 0.075	 0.55 0.060 0.080	 0.50 0.090 0.120	DIN E 51834
Grey staining test: SK number	-	←					> 10			→			FVA information sheet No. 54/I - IV

1 mm²/s ≙ 1 cSt

These technical data are based on average test results. Minor deviations may occur from case to case.
For further product information please contact the Technical Service of Castrol Industrie GmbH – Performance Lubrication.

162e State: 08/01