



Product Data

Optigear RMO

Synthetic high performance and long-term

Description

OPTIGEAR™ RMO is a multi-grade, high performance and long-term gear oil, especially developed for drive units in rail-borne traffic and machine construction at extreme climatic conditions. Low temperatures down to - 40°C/- 40°F can be handled without preheating the gears.

Optigear RMO is formulated with Castrol's Microflux Trans (MFT) Plastic Deformation (PD) additive. MFT PD helps improve performance when operating temperature and loads reach a certain level of activation energy, by enabling the micro-smoothing of surface roughness without increasing wear. The smoothed surface delivers optimum wear protection and an extremely low coefficient of friction, especially in applications which experience extreme pressure, shock loads, vibrations or low speeds. MFT PD helps to protect against scuffing and shock loading, while maintaining a high load carrying capacity, and can help prevent the progression of micro-pitting in pre-damaged gears.

Application

All kinds of spur gearings even when subjected to the most extreme loads.
Bevel gear pairs, also conical (hypoid) and at high changing loads.
Dip lubrication at high speeds as well as injection and oil mist lubrication.

Advantages

Optigear RMO has the following advantages when compared to conventional gear oils:-

- High load carrying capacity and wear protection.
- Reliable oil supply of bearings at low temperatures.
- High scuffing load capacity.
- Lowering of coefficient of friction and operating temperature.
- Combines good high-temperature with excellent low-temperature properties.
- Reduced running-in period of new drives.
- Good corrosion protection.
- Long service life of gears.

Typical Characteristics

Name	Method	Units	Optigear RMO
Colour	ASTM D1500	-	green - brown
Density @ 15°C / 59°F	ISO 12185 / ASTM D4052	kg/m ³	879
Kinematic Viscosity @ 40°C / 104°F	ISO 3104 / ASTM D 445	mm ² /s	150
Kinematic Viscosity @ 100°C / 212°F	ISO 3104 / ASTM D 445	mm ² /s	18
Viscosity Index	ISO 2909 / ASTM D2270	-	133
Pour Point	ISO 3016 / ASTM D97	°C/°F	-48 /-54.4
Flash Point - open cup method	ISO 2592 / ASTM D92	°C/°F	190/374
FZG Gear Scuffing test - A/16.6/90	ISO 14635-1 (modified)	Failure Load Stage	>12

Subject to usual manufacturing tolerances

Additional Information

- Miscible with mineral gear oils.
- Maximum performance is only guaranteed if not mixed with any other product.
- Compatible with conventional sealing materials or paints in gear housings.
- Not for synchro-mesh transmissions or locking differentials.

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