

Typical Properties

Mobil Vacuoline	525	528	533	537	546
ISO VG	100	150	220	320	460
Viscosity					
cSt at 40°C	93	148	223	320	468
cSt at 100°C	10.7	14.6	19.2	24.0	30.7
Viscosity Index	95	95	95	95	95
Specific Gravity	0.884	0.889	0.895	0.899	0.902
Flash Point, °C	230	240	250	270	290
Pour Point, °C	-15	-15	-15	-15	-15
Rust Protection					
Distilled Water	Pass	Pass	Pass	Pass	Pass
Copper Corrosion					
3hrs at 100°C	1B	1B	1B	1B	1B
Demulsibility at 82°C					
minutes to 3ml	10	10	12	15	20
FZG Gear Test					
Failure Stage	12+	12+	12+	12+	12+
Color	3.5	3.5	4.0	5.0	6.5

Health and Safety

Based on available toxicological information, these products produce no adverse effects on health when properly handled and used. No special precautions are suggested beyond attention to good personal hygiene, including laundering oil-soaked clothing and washing skin contact areas with soap and water. Additional health and safety information on these products, including Material Safety Data Bulletins, is available on request from your local ExxonMobil company.

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Mobil Vacuoline 500 Series
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Due to continual product research and development, the information contained herein is subject to change without notice.

Mobil Vacuoline 500 Series

Premium Circulation Oils for No-Twist Rod Mills

The Mobil logo consists of the word "Mobil" in a blue, sans-serif font. To the right of the text is a red, curved shape that resembles a stylized flame or a drop, which is part of the Mobil brand identity.

Product Description

Mobil Vacuoline 500 Series are premium quality, heavy duty circulating oils primarily intended to meet the critical requirements of high speed No-Twist Rod Mills, manufactured by Morgan Construction Company and Daniell. They are formulated from high-quality base stocks and additives to provide enhanced film strength, antiwear and anti-scuff properties. The oils have good wettability and provide extra oil retention and thin film protection against rust and corrosion on gears, shafts, bearings, adjusting screws and all housing sections. Their antiwear properties eliminate scuffing and scoring of high-speed (3000m/min) gearing as is evidenced by their high rating in FZG Gear Test, particularly important in non-ferrous rod mills where the gears are more heavily loaded. The Mobil Vacuoline 500 Series possess good demulsibility which is retained under conditions of severe water contamination.

Benefits/Advantages

- Good protection against rust and protection.
- Outstanding antiwear performance.
- Good performance under severe loads with heavy contamination due to excellent water separation characteristics.
- Long oil charge life due to high resistance to oxidation and thermal degradation.
- Fewer unscheduled stoppages and lower maintenance costs through a balanced high performance lubricant formulation.

Application

Mobil Vacuoline 500 Series lubricants are recommended for use in both ferrous and non-ferrous Morgan No-Twist Rod Mills and Morgoil back-up roll bearing systems. For optimum performance, appropriate viscosity oils should be selected according to the loading and for operations without hydrodynamic lift.

Mobil Vacuoline 525 is recommended for service in the single circulating oil system of high-speed rod mills. Such mills operate at speeds greater than 3000m/min, with speeds of over 4500m/min being projected in the future. These mills operate under severe loads in the presence of continuous water contamination. The balanced formulation of Mobil Vacuoline 525 enables extended trouble-free rod production to be achieved.

The remaining grades in the Mobil Vacuoline 500 Series are recommended for Morgan No-Twist Rod Mills which have two lubrication systems. The higher viscosity oils are used in the roughing stands, while the lower viscosity grades are used in the higher-speed finishing stands.

