



Mobil DTE™ PM Series

Mobil Industrial , Estonia

Paper Machine Lubricants

Product Description

Mobil DTE™ PM Series products are high-quality, high-performance lubricants specifically designed for demanding industrial paper machine circulating systems. They are engineered to provide exceptional lubrication qualities while protecting system components from rust and corrosion. This is particularly important in the wet-end of the paper machine where water and chemical contaminants can enter the lubrication system. The Mobil DTE PM Series oils are formulated to provide maximum protection of gears and bearings operating under severe conditions. They exhibit good viscosity characteristics allowing reduced start-up to production times while maintaining excellent viscosity characteristics at high temperatures. The DTE PM Series oils provide excellent resistance to oxidation and thermal degradation, exceptional protection against rust and corrosion, and a high level of anti-wear performance.

Mobil DTE PM Series oils are formulated with select high-quality base oils and a proprietary advanced technology additive system carefully balanced to attain the highest performance standards. These fluids permit the use of high steam pressures, temperatures and machine speeds common in high output paper machines. Their outstanding demulsibility and filterability assure excellent performance in the presence of water and the ability to retain effective filtration even at very fine filtration levels. They readily separate water and retain their colour characteristics for extended periods of operation.

Features and Benefits

The Mobil DTE PM Series oils have proven their performance capabilities in modern high-output paper machine lubrication. Their excellent performance properties in areas of wear protection, enhanced oxidation stability, chemical stability, effective rust and corrosion protection, colour stability, and filterability help to increase maintenance service intervals. This results in less required maintenance, longer equipment life and increased production capacity.

Features	Advantages and Potential Benefits
Exceptional Wear Protection	Improved bearing and gear performance
Outstanding Oxidation and Thermal Stability	Longer oil life
	Lower filter replacement costs
	Cleaner systems
	Reduced system deposits
Effective Water Separation Properties	Allows easier removal of water
	Reduces formation of emulsions in systems
Good Anti-Fatigue Performance	Reduces fatigue failures of bearings and gears
Excellent Filterability	Keeps oil lines and flow control mechanisms free of deposits
	Improved oil flow and cooling performance
	Lowers filter replacement costs
High Level Rust and Corrosion Protection	Protects gears and bearings in wet environments
	Provides protection against corrosion in a wet and humid environment

## Applications

- Lubrication of industrial paper machine circulating systems
- Application involving circulation systems operating over a wide temperature range
- Systems that must be started and brought on line quickly
- Circulation systems' lubricating gears and bearings

## Properties and Specifications

Property	100	150	220	320
Grade	ISO 100	ISO 150	ISO 220	ISO 320
Copper Strip Corrosion, 3 h, 100 C, Rating, ASTM D130	1A	1A	1A	1A
Emulsion, Time to 3 mL Emulsion, 82 C, min, ASTM D1401	10	20	20	20
FZG 4-Square Load Support, Fail Stage, DIN 51354			12	12
Flash Point, Cleveland Open Cup, °C, ASTM D92	240	250	260	250
Foam, Sequence I, Stability, ml, ASTM D892	0	0	0	0
Foam, Sequence I, Tendency, ml, ASTM D892	0	10	10	10
Foam, Sequence II, Stability, ml, ASTM D892	0	0	0	0
Foam, Sequence II, Tendency, ml, ASTM D892	40	30	30	30
Foam, Sequence III, Stability, ml, ASTM D892	0	0	0	0
Foam, Sequence III, Tendency, ml, ASTM D892	0	10	10	10
Kinematic Viscosity @ 100 C, mm <sup>2</sup> /s, ASTM D445	11.4	14.7	19	25.4
Kinematic Viscosity @ 40 C, mm <sup>2</sup> /s, ASTM D445	100	150	220	320
Pour Point, °C, ASTM D97	-6	-6	-6	-6
Rust Characteristics, Procedure A, ASTM D665	Pass	Pass	Pass	Pass
Rust Characteristics, Procedure B, ASTM D665	Pass	Pass	Pass	Pass
Specific Gravity, 15.6 C/15.6 C, ASTM D1298	0.884	0.888	0.889	0.892
Viscosity Index, ASTM D2270	95	95	95	95

## Health and Safety

Health and Safety recommendations for this product can be found on the Material Safety Data Sheet (MSDS) @ <http://www.msds.exxonmobil.com/psims/psims.as>

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Typical Properties are typical of those obtained with normal production tolerance and do not constitute a specification. Variations that do not affect product performance are to be expected during normal manufacture and at different blending locations. The information contained herein is subject to change without notice. All products may not be available locally. For more information, contact your local ExxonMobil contact or visit [www.exxonmobil.com](http://www.exxonmobil.com)

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