



Mobil DTE™ PM Series

Mobil Industrial , United States

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 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 when 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 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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04-2024

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