# Mobilmet 440 Series

Mobil Industrial , Israel

High Performance Oil-Based Cutting Fluids

**Product Description**

Mobilmet 440 Series fluids are high performance, multi-service, non-corrosive straight cutting fluids. They are designed for moderate to heave duty cutting operations. They are also suitable for machine tool lubrication and use as hydraulic fluids in specific applications. They are formulated from high quality base oils and chlorine-free additives to provide effective machine performance in a wide variety of moderate to severe operations. They are non-staining to both ferrous and non-ferrous metals during machining. Mobilmet 440 Series fluids are formulated to prevent the formation of oil mist in the vicinity of the machine tool, thus contributing to a safer and more pleasant working environment.

**Features and Benefits**

Mobilmet 440 Series Fluids are designed for a very wide variety of non-corrosive cutting and machining operations that range from moderate to severe. They provide long service life, improved tool life and lower reject rates. They are multi-purpose cutting oils that are also suitable for machine tool lubrication and use as hydraulic fluids. These features help minimize the effects of cross contamination and reduce the costs associated with unscheduled fluid change-outs or reduced machine and tool performance.

| Features | Advantages and Potential Benefits |
|---|---|
| Multi-service characteristics | Reduced cross-contamination problems |
| | Reduced waste and lower maintenance |
| Non-corrosive / non-staining | Improved quality of finished materials |
| Highly effective machining performance | Longer tool life and reduced downtime |
| | Improved surface finish and fewer rejects |
| | Increased feed rates and machine speeds |
| Effective anti-mist characteristics | Cleaner and safer working environment |

**Applications**

Mobilmet 440 Series fluids are recommended for a wide range of moderate to severe machining operations on all types of metals. Mobilmet 443 is recommended for machining non-ferrous metals and their alloys, normal to difficult-to-machine steels, including cementation steels, carbon steels and high alloy steels. Mobilmet 446 and Mobilmet 447 are recommended for severe duty gear hobbing, gear cutting and shaving, gear and thread grinding, milling, and broaching operations.

**Properties and Specifications**

| Property | 443 | 446 | 447 |
|---|---|---|---|
| Grade | ISO VG 15 | ISO VG 32 | ISO VG 46 |
| Copper Strip Corrosion, 3 h, 100 C, Rating, ASTM D130 | 2A | 2A | 2A |
| Density @ 15 C, kg/l, ASTM D4052 | 0.86 | 0.88 | 0.89 |

| Property | 443 | 446 | 447 |
|---|---|---|---|
| Flash Point, Cleveland Open Cup, °C, ASTM D92 | 170 | 190 | 220 |
| Kinematic Viscosity @ 100 C, mm2/s, ASTM D445 | 3.8 | 6.0 | 7.4 |
| Kinematic Viscosity @ 40 C, mm2/s, ASTM D445 | 15.3 | 32.6 | 45.9 |
| Pour Point, °C, ASTM D97 | -33 | -24 | -33 |
| Viscosity Index, ASTM D2270 | 145 | 132 | 124 |

**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.aspx

All trademarks used herein are trademarks or registered trademarks of Exxon Mobil Corporation or one of its subsidiaries unless indicated otherwise.

05-2024

ExxonMobil

Exxon Mobil Esso

© Copyright 2003-2026 Exxon Mobil Corporation. All Rights Reserved