Mobilmet 440 Series

Mobil Industrial , Ireland

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
Esso Petroleum Company limited
ExxonMobil House, Ermyn Way, Leatherhead, Surrey KT22 8UX

44 (0)1372 222000
http://www.exxonmobil.com

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
ExxonMobil is comprised of numerous affiliates and subsidiaries, many with names that include Esso, Mobil, or ExxonMobil. Nothing in this document is intended to override or supersede the corporate separateness of local entities. Responsibility for local action and accountability remains with the local ExxonMobil-affiliate entities.

ExxonMobil

Exxon Mobil Esso

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