



Mobilmet 440 Series

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 heavy 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 & 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.



Typical Properties

Mobilmet® 440 Series	443	446	447
Viscosity, ASTM D 445			
cSt @ 40°C	15.3	14.1	13.9
cSt @ 100°C	3.8	6.0	7.4
Viscosity Index, ASTM D 2270	145	132	124
Color, ASTM D 1500	2.5	2.5	2.5
Pour Point, °C, ASTM D 97	-33	-24	-33
Flash Point, °C, ASTM D 92	194	210	244
Specific Gravity @ 15°C kg/l, ASTM D 4052	0.86	0.88	0.89
Copper Strip Corrosion, ASTM D 130, 3 hrs @ 100°C, max	1B	1B	1B

Health & Safety

Based on available information, this product is not expected to produce adverse effects on health when used for the intended application and the recommendations provided in the Material Safety Data Sheet (MSDS) are followed. MSDS's are available upon request through your sales contract office, or via the Internet. This product should not be used for purposes other than its intended use. If disposing of used product, take care to protect the environment.

Switzerland use: Toxicity class: free

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