

METALWORKING FLUID LM SERIES Ferrous/Non-Ferrous Metals

	<u>Typical Properties</u>		
	LM-22	LM-32	LM-46
Viscosity, cSt			
At 40 °C	22	32	46
At 100 °C	4.3	5.3	6.65
Sulfur	NONE	NONE	NONE
Chlorine	NONE	NONE	NONE
Synthetic EP	Present	Present	Present
Phosphorus	Present	Present	Present
Copper Strip Corrosion; 3hrs@100 °C	1B(max)	1B(max)	1B(max)
Flash Point, (COC) Deg °F (°C)	395(202)	410(210)	415(213)
Specific Gravity, 60 °/60 °F	0.862	0.874	0.877
Gravity, API @ 60 °F	32.7	30.4	29.9
Density, lbs/gal	7.178	7.278	7.303

The values shown are typical of current production. Some are controlled in the manufacturing process, while others are not. All of them may vary within tolerable ranges.

The LM Metalworking Series are formulated for a wide variety of light to moderate machining of both ferrous and non-ferrous metals. They are chlorine-free and contain a synthetic anti-weld/EP agent that eliminates sulfur and fatty oil components in conventional cutting oils. The product contains a phosphorus compound for additional smoothness, especially useful in intricate cuts and the extension of tool tip life. The fluids have excellent thermal, oxidative and hydrolytic stability. Metalworking Fluid LM provides corrosion/rust protection to both working part and machine.

The fluids have multi-use for machine tool lubrication and as *hydraulic fluid where a common oil is desired. The three viscosity are provided for the appropriate machining operations of materials of relative hardness and can be incorporated in cutting mild steels, non-ferrous alloys, copper, silicon-bronze, and nickel-matrixed materials.

*[It should be noted that the proper viscosity should be selected for the hydraulic application.]