

METALWORKING FLUID LM SERIES

Ferrous/Non-Ferrous Metals

Product Description

The LM ISO 22 & ISO 32 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. The products contain 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. These LM series provide corrosion/rust protection to both working part and machine.

Metalworking Fluid LM ISO 46 incorporates all the characteristics of ISO Grades 22 & 32 with additional Extreme Pressure (EP) properties and a lubricity agent that assists in enhanced smoothing and heavy-duty cutting operations.

The fluids have multi-use for machine tool lubrication and as *hydraulic fluid where a common oil is desired. The three viscosity grades 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-matrix materials.

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

Typical Properties

Property	LM-22	LM-32	LM-46
Viscosity, cSt @ 40°C	22	32	46
Viscosity, cSt @ 100°C	4.3	5.3	6.65
Sulfur	NONE	NONE	Present
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 (°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.