

Technical Data Sheet

Solutions for LMM-6012 Screen-Printable



LMM-6012 is a laser marking material for metals. It is similar to LMM-6000 but is applied to the substrate by screen printing. It can be used on a variety of bare metal substrates including stainless steel, brass, aluminum, titanium, tin, nickel and the like. LMM-6012 will not work on metals with a lacquered coating.

Physical Properties

Appearance	Smooth, gray slightly thick ink-like paste.
Volatile Organic Compounds (VOC's)	38.4% (5.53 lbs/gal)
Flash Point	>200°F / 93°C
Drying Rate	Slow
Dried Film Strength	Moderate

Strength of Product

Screen printing allows precise control of marking area/size. No overspray as with LMM-6000, minimizes waste. Product can be screen printed on various metals, dried and laser marked at a later time.

Recommended Application Parameters

Application Method	Screen Print
Screen Mesh	160-200
Wet Film Thickness	25 - 35 microns
Thinner	1588 Medium
Printing Viscosity	6000-12000cps @ 25.0 °C

Curing/Drying of Product

Drying Method	Forced drying with heat, 200-250F.
Drying Parameters	Force dry with heat, 200-250F for approximately 5 – 15 minutes.

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Laser Marking of Product

Laser Marking Method	CO ₂ , YAG or Fiber laser
Recommended Starting Point for Settings	CO ₂ : 90-100% power (35 watt laser) 15-30% speed 500 DPI / 500 PPI YAG: 20-25 watts 10-20 inches/sec speed

Product Preparation

Insure that the product has been well mixed prior to use. Some settling may occur during long storage. Paste temperature should be equivalent to your printing room temperature prior to measuring viscosity or application.

Storage Recommendations

Product must be stored in cool and dry conditions. Storage temperature should be between 40°F (5°C) and 95°F. Settling may occur if stored for long periods of time. Before use, products must be stirred thoroughly. Partly used containers must be tightly sealed after use. If stored as recommended, a minimum shelf life of six months after the production date is guaranteed.

Viscosity Test Method

Ferro product viscosity is measured by a Brookfield™ RVT DVIII Rheometer using a #27 spindle at 100 RPM, 24.0 °C/75.2 °F.

Contact Information

For questions about properties of this product, application techniques or laser settings, please contact:
800-245-4951 Customer Service & Technical Service