



## TECHNICAL INFORMATION

### LASER MARKING PRODUCT LMM-6012 Screen Print Metal Marking Material

**Please note that this is not currently a stock product but can be obtained normally within 14 days**

#### **1.0 Product Description**

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.

#### **2.0 Product Characteristics**

##### **2.1 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

##### **2.2 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.

##### **2.3 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

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#### **2.4 Curing/Drying of Product**

**Drying Method** Forced drying with heat, 200-400F.

**Drying Parameters** Force dry with heat, 200-400F for approximately 5 – 15 minutes.

#### **2.5 Laser Marking of Product**

**Laser Marking Method** CO<sub>2</sub>, YAG or Fiber laser

**Recommended Starting Point for Settings** CO<sub>2</sub>: 90-100% power (35 watt laser)  
15-30% speed  
500 DPI / 500 PPI  
YAG: 20-25 watts  
10-20 inches/sec speed

### **3.0 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.

### **4.0 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.

### **5.0 Viscosity Test Method**

Ferro product viscosity is measured by a Brookfield™ RVT DVIII Rheometer using a #27

spindle at 100 RPM, 24.0 °C.