

# CerMark™ LMM6012 Black for Metal (Screen Print)



## Recommended use:

LMM6012, a CerMark™ product, is a special formulation of LMM6000 designed for screen printing application. This makes for an economical process where specific areas can be consistently coated across a wide area. It is a general purpose laser marking ink, and is recommended for creating black marks on a variety of bare metal substrates. LMM6012 will not work on metals with a lacquered coating.

## Recommended substrates:

LMM6012 is a fairly flexible product which is recommended for many metals. The following list is made up of substrates on which LMM6012 works well. This list is not exhaustive, however, so if your substrate does not appear on the list, this does not mean LMM6012 will not mark it.



Stainless Steel  
Stainless Steel - Bright Annealed  
Galvanized Steel  
Brass  
Aluminum  
Copper

Chrome Plating  
Nickel Plating  
Gold Plating  
Silver Plating  
Titanium  
Pewter

## Lasers that work:

LMM6012 works equally well with CO<sub>2</sub> and solid state lasers.

## Dilution:

LMM6012 can be screen printed as-is from the container. It can be reduced or thinned if necessary to achieve good coverage with 1588 Medium. 1588 Medium can be used as needed to achieve acceptable print.

## Application methods:

Please make sure that the surface to be marked is free and clear of oils, cleaning agent films, dust, and lacquer coating.

- **Screen print application:** After dilution and thorough mixing, the ink should be applied to the screen using an appropriate applicator, the same as with a conventional screen printing ink. The goal is to set up the printer to apply a consistent coat having a typical thickness of about 1mil (25µm). As with any screen printing process, depending on the workshop environment, the ink may require periodic replenishment and dilution to avoid drying out.

The thinning agent can be used for cleaning the screen and tools after use. Any unused ink should be decanted and stored in a separate sealed container for future use.

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## **Drying time & methods:**

LMM6012 is a slow drying material. It takes about 5 - 15 minutes for the coating to dry at 200-400F temperatures.

## **Product Appearance:**

LMM6012 is a smooth, greenish gray, slightly thick ink-like paste, having the consistency of pancake batter.

LMM6012 is the same color when dry, with no gloss. It will dry to a hard film and have moderate resistance to scratching.

## **Shipping options:**

All LMM6012 products are considered by the US Department of Transportation (DOT) to be "ORM-D" or "Consumer Commodity". These products are generally shipped via ground in the contiguous United States. Products shipped via air to Hawaii or to international destinations will be subject to additional hazardous materials charges. This is due to regulations around the shipping of alcohol-based chemicals on airplanes. Please contact customer service for further details.

## **Product storage:**

All LMM6012 products should be stored between 40°F (5°C) and 95°F (35°C) in a dark, dry place.

## **Disposal:**

LMM6012 is an alcohol-based material. After laser bonding, any excess, un-bonded material can be washed off the substrate and down the drain into your normal water/sewer waste area.

Unused containers of liquid ink/paste should be opened, the alcohol base evaporated into a well-ventilated area, and once only solids remain in the container, the container with solids can be safely disposed of in your regular trash and solid waste area.

## **Availability:**

LMM6012 comes in 5 sizes: for pricing and availability, please contact TherMark.

LMM6012.50	50gm liquid ink, up to 1,700 sq/in
LMM6012.250	250 gm liquid ink, up to 8,500 sq/in
LMM6012.500	500 gm liquid ink, up to 17,000 sq/in
LMM6012.1000	1,000 gm liquid ink, up to 34,000 sq/in

\* Product coverage in above table assumes proper application (dilution/coating thickness).