Technical Data Sheet

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Solutions for LMM-6000 Aerosol

CerMark™

LMM-6000 is our laser marking material for metals. **LMM-6000** is ethanol based which allows for a fast drying time. It can be used on a variety of bare metal substrates including stainless steel, brass, aluminum, titanium, tin, copper, nickel and the like. If the metal has **a lacquered** coating, the **LMM-6000** marking material **will not work**.

Using LMM-6000:
LMM-6000 is ready to use in aerosol can form. **IMPORTANT: Shake can well before using. Allow the agitator ball to rattle for at least 2 minutes. Failure to shake thoroughly will result in spitting and clogging of the nozzle.** For best results, use when aerosol is between 70 and 90 degrees F.

Applying:
Clean the surface of the metal so that it is free of any type of lubricants or oils. Hold can approximately 8-12 inches from substrate to be sprayed. Depress valve fully during spray. Apply a thin coat of **LMM-6000** to the metal, try to apply an even coating. Try to cover the area to be marked with a light spray, using two passes. If the material is applied too thick, it will require more power to make the mark. It is important that **LMM-6000** is applied with **an even and thin coat.** Applying **LMM-6000** may require practice to achieve the right coverage. After use, the can nozzle should be cleaned by inverting the can and spraying until mist becomes clear. Any excess material on the nozzle should be cleaned off with water. **We recommend that all CerMark LMM products be applied in a well-ventilated area or spray booth designed to pull air away from user.**

Drying:
It is important that the **LMM-6000** is allowed to dry thoroughly. It will air dry in about 2 minutes. This process can be sped up by using an oven, hair dryer or a heat lamp.

Marking On Stainless Steel & Other metals:

This step may require some trial and error to optimize your laser with a particular substrate. Keep in mind that all lasers react differently depending on the substrate, the type of laser, the laser's power, dot size, and other factors**:**

	25 Watt	35 Watt	50 Watt
Power	100%	100%	100%
Speed	10%	15%	20-30%
DPI/PPI	500/500	500/500	500/500

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Marking On Aluminum & Brass:

Softer Metals require more power or slower speeds to obtain a permanent mark. We recommend at least a 50 Watt CO_2 lasers for such metals.

	Brass			Aluminum		
	25 Watt	**35 Watt**	**50 Watt**	**25 Watt**	**35 Watt**	**50 Watt**
Power	100%	100%	100%	100%	100%	100%
Speed	2%	4%	6%	4%	7%	10%
DPI/PPI	500/500	500/500	500/500	500/500	500/500	500/500

Additional Testing Grid (C02) similar testing can be adapted for solid state systems as well

- Set laser power output at 100% or 90% is optional for laser systems over 75 watts.
- Then laser test marks at various speed settings one beside the other.
- Scrub test marks with 3M Scotch-Brite / Medium Duty Scrub Pad to verify durability.
- Based on these results choose the best setting for your application.

If you are using a **YAG** laser, you will need to use about **20-25 Watts** of power and a writing speed between **10-20 inches/second**. Again, you may need to run several tests to optimize the settings for your particular laser, similar to above Testing Grid.

Clean up:

Wash with water or a wet towel or sponge.

Contact Information:

To place an order or questions about properties of this product, application techniques or laser settings please call:

800-245-4951
Customer Service & Technical Service Representative