

Technical Data Sheet

Physical Testing of LMM-6000 Laser Marks



Laser marks were made on type 304 stainless steel tags using LMM-6000 and a CO2 laser. Marks were made at settings of 100% power, 12% speed, 500 DPI on a 35 watt laser.

Tags were totally immersed in the test solutions.

Exposure Time

Organic Solvents	1 Hour	12 Hours	24 Hours	1 Week
• Gasoline	No effect	No effect	No effect	No effect
• Limonene	No effect	No effect	No effect	No effect
• Methyl Ethyl Ketone	No effect	No effect	No effect	No effect
• N-Butanol	No effect	No effect	No effect	No effect
• Mineral Spirits	No effect	No effect	No effect	No effect
• Xylene	No effect	No effect	No effect	No effect
• Acetone	No effect	No effect	No effect	No effect
• Propylene Carbonate	No effect	No effect	No effect	No effect
• Ethanol	No effect	No effect	No effect	No effect
• DMSO	No effect	No effect	No effect	No effect
• Motor Oil	No effect	No effect	No effect	No effect

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Acid/Bases

• Hydrochloric Acid 35%	No effect		No effect		Test stopped - see notes
• Nitric Acid 68%	No effect	No effect	No effect	No effect	No effect
• Sulfuric Acid (conc.)	No effect	No effect	No effect	No effect	No effect
• Acetic Acid 99.5%	No effect	No effect	No effect	No effect	No effect
• Hydrogen Peroxide 30%	No effect	No effect	No effect	No effect	No effect
• Sodium Hydroxide 25%	No effect	No effect	No effect	No effect	No effect
• Ammonium Hydroxide 20%	No effect	No effect	No effect	No effect	No effect



Physical Testing of LMM-6000 Laser Marks

Other

- Boiling H2O
• LN2 (Cold)
• Flame (Hot)
 - Hot/Cold Cycling
- Marks soaked in boiling water for 1 hr. - no effect
Marks dipped in liquid nitrogen - no effect
Marks heated in a propane flame until cherry red
Metal discolored, no effect on mark.
- Marks heated red hot and immediately plunged in liquid nitrogen.
Metal discolored, no effect on mark.

Contact Information

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

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