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									
 Hydrochl Acid 35% 		No e	effect	Test stopped - see notes					
• Nitric Aci 68%	d No effect	No effect	No effect	No effect					
• Sulfuric Acid (conc.)	No effect	No effect	No effect	No effect					
• Acetic Acid 99.5%	No effect	No effect	No effect	No effect					
HydrogerPeroxide30%		No effect	No effect	No effect					
Sodium Hydroxid 25%	No effect le	No effect	No effect	No effect					
AmmoniuHydroxid20%		No effect	No effect	No effect					



Physical Testing of LMM-6000 Laser Marks

Other

Boiling H2O
 LN2 (Cold)
 Flame (Hot)
 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.

Hot/Cold Cycling
 Marks heated red hot and immediately plunged in

liquid nitrogen.

Metal discolored, no effect on mark.

Notes:

Hydrochloric acid testing: - Acid dissolves the steel tag and was not run over 12 hrs.

- After 1 hr. acid dissolved 0.2767 gms of steel tag (4.7%),

laser mark was unaffected.

- After 12 hrs. dissolved 1.8057 gms of steel tag (30.6%), laser mark unaffected, now having a distinctly raised feel.

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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