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TDS: Metal Marking Plates
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Technical Data Sheet

Panduit Stainless Steel Marker Plates and Tags

This specification is intended to outline the physical and chemical properties of *PANDUIT*'s stainless steel marker plates and tags and include the following material identifiers:

Part Number Prefixes	
MMP*	MT*

PRODUCT SPECIFICATIONS:

Description:	Material is RoHS compliant (European Union directive 2002/95/EC). Panduit stainless steel marker plates and tags provide permanent identification of pipes conduits, valves, cables and equipment in harsh environments. These marker plates and tags deliver long life when exposed to chemicals, vibrations, radiation, weathering and extreme temperatures
Material:	304 and 316 grade stainless steel.
Marking Method:	Embossed and Laser Etched.
Thickness:	0.010 inch, 0.015 inch and 0.035 inch
Service Temperature Range:	-112°F to 1000°F (-80°C to 538°C)
Storage Conditions:	Store at 70°F (21°C) and 50% Relative Humidity.

PERFORMANCE PROPERTIES:

Embossed and laser etched marker plates and tags were tested for their performance properties. Unless otherwise noted results are for both marking methods.

PROPERTIES	TEST METHOD	PERFORMANCE
UV Resistance	1000 hours in Fluorescent UV Weatherometer ASTM G154	No visible change observed
Weatherability	1000 hours in Xenon Arc Weatherometer, ASTM G155, Cycle 1	No visible change observed
High Service Temperature	30 days at 538^{0}C(1000^{0}F)	Discoloration observed but markings still legible
Low Service Temperature	30 days at -80^{0}C(-112^{0}F)	No visible change observed
Salt Fog Resistance	2000 hours in 5% salt fog solution chamber ASTM B117	No visible change observed
Boiling Water Resistance	Soaked in boiling water for 1 hour	No visible change observed
Flame Resistance	Heated to cherry red	Discoloration observed but markings still legible
Liquid Nitrogen Resistance	Dipped in liquid nitrogen for 20 minutes	No visible change observed
Thermal Cycle Resistance	Heated to cherry red and then dipped in liquid nitrogen	Discoloration observed but markings still legible

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CHEMICAL RESISTANCE TEST:

Embossed and laser etched marker plates and tags were tested for their chemical resistance properties. Unless otherwise noted results are for both marking methods.

CHEMICAL	1 hour immersion	24 hour immersion	7 day immersion
Water	NC	NC	NC
Isopropyl Alcohol	NC	NC	NC
Ethanol	NC	NC	NC
Gasoline	NC	NC	NC
Mineral Spirits	NC	NC	NC
Skydrol	NC	NC	NC
Motor Oil	NC	NC	NC
Acetone	NC	NC	NC
Methyl Ethyl Ketone	NC	NC	NC
Xylene	NC	NC	NC
25% Sodium Hydroxide	NC	NC	NC
20% Ammonium Hydroxide	NC	NC	NC
37% Hydrochloric Acid	Discolored but markings still legible	Discolored but markings still legible	Material Disintegrates
50% Sulfuric Acid	Discolored but markings still legible	Embossed marking discolored but legible. Laser etched marking is illegible	Embossed marking discolored but legible. Laser etched marking is illegible
Glacial Acetic Acid	NC	NC	NC

NC = No Change

LIMITED WARRANTY

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