

**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.<br><br>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<br>ASTM G154      | No visible change observed                        |
| Weatherability             | 1000 hours in Xenon Arc Weatherometer,<br>ASTM G155, Cycle 1 | No visible change observed                        |
| High Service Temperature   | 30 days at 538°C(1000°F)                                     | Discoloration observed but markings still legible |
| Low Service Temperature    | 30 days at -80°C(-112°F)                                     | No visible change observed                        |
| Salt Fog Resistance        | 2000 hours in 5% salt fog solution chamber<br>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 |

**Technical Data Sheet****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

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- Подбор аналогов.
- Поставку компонентов в любых объемах, удовлетворяющих вашим потребностям.
- Приемлемые сроки поставки, возможна ускоренная поставка.
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- Наличие сертификата ISO.

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- Регистрацию проекта у производителя компонентов.
- Техническую поддержку проекта.
- Защиту от снятия компонента с производства.
- Оценку стоимости проекта по компонентам.
- Изготовление тестовой платы монтаж и пусконаладочные работы.



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