

# Meldin® 7001 DIRECT FORMED

The following table is a list of typical physical property values for Meldin® 7001 Direct Formed

Properties	ASTM	Units [Metric]	Value [Metric]
<b>GENERAL</b>			
Specific Gravity	D792	—	1.34
<b>MECHANICAL</b>			
Tensile Strength	D638	psi [MPa]	10,500 [72.4]
Elongation	D638	%	8.0
Flexural Strength	D790	psi [MPa]	12,800 [88.3]
Flexural Modulus	D790	psi x 10 <sup>5</sup> [GPa]	3.7 [2.6]
Compressive Stress @ 1% strain	D695	psi [MPa]	3,000 [21]
Compressive Stress @ 10% strain	D695	psi [MPa]	14,000 [96.5]
Compressive Modulus	D695	psi x 10 <sup>5</sup> [GPa]	2.9 [2.0]
Deformation under Load @ 2000 psi	D621	%	0.1

## Thermal

Coefficient of Thermal Expansion 73 – 500 °F [23 – 260 °C]	E831	in/in/°F x 10 <sup>-5</sup> [m/m/°C]	2.7 [4.9]
Thermal Conductivity	F433	BTU in/hr ft <sup>2</sup> °F [W/m.K]	2.2 [0.31]
Flammability	UL94	—	V-0, 5VA
High Temperature Dimensional Stability @ 500 °F [260 °C]	Internal	% Change	0.00 Max

## MECHANICAL @ 500 °F [260 °C]

Tensile Strength	D638	psi [MPa]	5,500 [38]
Elongation	D638	%	7.5
Flexural Strength	D790	psi [MPa]	7,000 [48]
Flexural Modulus	D790	psi x 10 <sup>5</sup> [GPa]	2.0 [1.4]

## SPECIFICATION QUALIFICATION

ASTM D 6456-99 Standard Specification for Finished Parts Made from Polyimide Resin (Type I D)

SAE AMS 3644G Polyimide, Molded Rod, Bar and Tube, Plaque, and Formed Parts (Class 1 Form D)

MIL-R-46198 Resin, Polyimide, Hot Pressed or Pressed and Sintered (Type I D)

**NOTE:** The data listed here falls within the normal range of properties but should not be used to establish specification limits nor used alone as the basis of design. Saint-Gobain Performance Plastics assumes no obligation or liability for any advice furnished by it or for results obtained with respect to the products.

## Features / Benefits

- Strong thermal and electrical insulation.
- Popular choice for structural parts in aerospace applications.
- High heat resistance and purity.

## Working Temperature Range

- -112 °F to + 600 °F  
[- 80 °C to + 315 °C]

## Color

- Brown

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