

**ColorFast® PEI1000**

Americhem - Polyetherimide

**General Information**
**Product Description**

PEI1000 is a medium flow injection molding grade of transparent polyetherimide (PEI) with excellent strength properties, and high chemical and flame resistance. It is suitable for a wide range of applications.

**General**

|                   |   |  |   |
|-------------------|---|--|---|
| Material Status   | • Commercial: Active <sup>1</sup>                                   |  |   |
| Availability      | • Africa & Middle East<br>• Asia Pacific                            | • Europe<br>• Latin America  | • North America   |
| Features          | • Excellent Colorability  |  |   |
| Uses              | • Aerospace Applications<br>• Connectors<br>• Consumer Applications | • Engineering Parts<br>• Industrial Applications<br>• Industrial Parts | • Military/Defense Applications<br>• Oil/Gas Applications<br>• Outdoor Applications |
| Forms             | • Pellets   |  |   |
| Processing Method | • Injection Molding   |  |   |

**Properties <sup>2</sup>**

| Physical  | Nominal Value    | Unit     | Test Method |
|---|------------------|----------|-------------|
| Density / Specific Gravity  | 1.27             |          | ASTM D792   |
| Melt Mass-Flow Rate (MFR) (337°C/6.6 kg)                          | 9.0              | g/10 min | ASTM D1238  |
| Molding Shrinkage - Flow (0.125 in)                               | 5.0E-3 to 7.0E-3 | in/in    | ASTM D955   |
| Water Absorption (24 hr)  | 1.3              | %        | ASTM D570   |
| Mechanical  | Nominal Value    | Unit     | Test Method |
| Tensile Strength <sup>3</sup> (Yield)                             | 16000            | psi      | ASTM D638   |
| Tensile Elongation <sup>3</sup> (Yield)                           | 7.0              | %        | ASTM D638   |
| Tensile Elongation <sup>3</sup> (Break)                           | 60               | %        | ASTM D638   |
| Flexural Modulus  | 509000           | psi      | ASTM D790   |
| Flexural Strength <sup>3</sup>                                    | 23900            | psi      | ASTM D790   |
| Impact  | Nominal Value    | Unit     | Test Method |
| Notched Izod Impact (73°F)  | 0.99             | ft·lb/in | ASTM D256   |
| Thermal   | Nominal Value    | Unit     | Test Method |
| Deflection Temperature Under Load (264 psi, Unannealed, 0.252 in) | 394              | °F       | ASTM D648   |
| Flammability  | Nominal Value    | Unit     | Test Method |
| Flame Rating  |                  |          | UL 94       |
| > 0.016 in  | V-2              |          |             |
| > 0.030 in  | V-0              |          |             |
| NBS Smoke Density - Flaming, Ds 4 min                             | 0.700            |          | ASTM E662   |

**Notes**

<sup>1</sup> The property values are based on natural product, values may be affected by coloring of the product.

<sup>2</sup> Typical properties: these are not to be construed as specifications.

<sup>3</sup> 2.0 in/min

