NHU® polypthalamide (PPA) is a semicrystalline high performance thermoplastic polyamide with an excellent balance of properties. PPA resin has excellent mechanical properties, outstanding dimensional stability, exceptional elevated thermal performance, and good processing characteristics. NHU® PPA resins bridge the cost/performance gap between the high-volume, moderate-performance engineering resins, such as thermoplastic polyesters and nyons, and the low-volume, high-cost specialty thermoplastics, such as polyetheretherketone (PEEK).

Compared to typical nyons, NHU® PPA resin has higher thermal capabilities and is stronger, stiffer and less sensitive to moisture. It retains its excellent mechanical properties (including fatigue and creep resistance) over a broad temperature range in humid and chemically aggressive environments. NHU® PPA outperforms typical Nylons and delivers long-life performance that includes:

- Higher strength and stiffness at elevated temperatures
- Better retention of properties in humid environments
- Greater resistance to a broader range of chemicals

These property advantages are manifested as improvements in:

- Dimensional stability
- Improved solvent (and hydrolysis) resistance
- Better high temperature mechanical property retention.

NHU® PPA resin is made with aromatic acid and aliphatic acid with aliphatic diamine.

With the versatile chemistry, NHU® PPA resins offer a broad range of base resin family, each offering unique processing and performance features.
NHU® Polphthalamide (PPA)

- **6T66**
  - 6T segment
  - 66 segment

- **6T61**
  - 6T segment
  - 6I segment

- **6T6I66**
  - 6T segment
  - 6I segment
  - 66 segment

### NHU® PPA Resins for Compounding Application

<table>
<thead>
<tr>
<th>Product Grade</th>
<th>Processing</th>
<th>IV (dL/g)</th>
<th>Tg (°C)</th>
<th>Tg (°F)</th>
<th>Tm (°F)</th>
<th>Tm (°F)</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>NHU® PPA N600</td>
<td>Hot water moldable (mold temp &lt;100°C)</td>
<td>0.70 – 1.00</td>
<td>90</td>
<td>194</td>
<td>308</td>
<td>587</td>
<td>Excellent processing characteristics and surface appearance.</td>
</tr>
<tr>
<td>NHU® PPA N201</td>
<td>Hot water moldable (mold temp &lt;100°C)</td>
<td>0.70 – 1.00</td>
<td>102</td>
<td>216</td>
<td>323</td>
<td>613</td>
<td>Provides the fast crystallization for short cycle times.</td>
</tr>
<tr>
<td>NHU® PPA N200</td>
<td>Hot oil moldable (mold temp &gt;135°C)</td>
<td>0.70 – 1.00</td>
<td>123</td>
<td>253</td>
<td>315</td>
<td>599</td>
<td>Delivers the highest long-term thermal performance.</td>
</tr>
<tr>
<td>NHU® PPA N100</td>
<td>Hot oil moldable (mold temp &gt;135°C)</td>
<td>0.70 – 1.00</td>
<td>133</td>
<td>271</td>
<td>313</td>
<td>595</td>
<td>Delivers the highest long-term thermal performance.</td>
</tr>
</tbody>
</table>

**Contact Information**
HT Materials Corporation  
634 Plank Road, Suite 202  
Clifton Park, NY 12065, USA  
Tel (518) 291-4657  
Email: sales@htmaterials.com  
Web: www.htmaterials.com

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