Zytel® ST801AHS NC010
NYLON RESIN
DuPont Performance Polymers

Technical Data

Product Description
Super Toughened, Heat Stabilized, Polyamide 66

General
Material Status • Commercial: Active
Literature 1 • Processing - Injection Molding (English)
• Typical Processing for DuPont Engineering Polymers (English)
UL Yellow Card 2 • E41938-234521
Search for UL Yellow Card • DuPont Performance Polymers
• Zytel®

Availability • Africa & Middle East
• Asia Pacific
• Europe
• Latin America
• North America
Additive • Heat Stabilizer
• Mold Release
• UV Stabilizer
Features • Heat Stabilized
Agency Ratings • UL Unspecified Rating
Forms • Pellets
Processing Method • Injection Molding
Part Marking Code (ISO 11469) • >PA66-HI<
Resin ID (ISO 1043) • PA66-HI

Physical
<table>
<thead>
<tr>
<th>Dry</th>
<th>Conditioned</th>
<th>Unit</th>
<th>Test Method</th>
</tr>
</thead>
</table>
Density | 1.08 | -- | g/cm³ | ISO 1183 |
Molding Shrinkage
Across Flow | 1.8 | -- | % | ISO 294-4 |
Across Flow : 80°C, 48 hr | 0.050 | -- | % |
Flow | 2.0 | -- | % |
Flow : 80°C, 48 hr | 0.050 | -- | % |
Water Absorption
24 hr | 1.1 | -- | % | ASTM D570 |
23°C, 24 hr, 2.00 mm | 6.7 | -- | % | ISO 62 |
Equilibrium, 23°C, 2.00 mm, 50% RH | 2.0 | -- | % | ISO 62 |

Mechanical
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<tr>
<th>Dry</th>
<th>Conditioned</th>
<th>Unit</th>
<th>Test Method</th>
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Tensile Modulus | 2000 | 900 | MPa | ISO 527-2 |
Tensile Stress
Yield | 52.0 | -- | MPa | ISO 527-2 |
50% Strain | -- | 45.0 | MPa |
Tensile Strain
Yield | 4.0 | -- | % | ISO 527-2 |
Break | -- | > 50 | % |
Nominal Tensile Strain at Break | 50 | -- | % | ISO 527-2 |
Flexural Modulus | 1900 | 800 | MPa | ISO 178 |
Films
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Tensile Elongation - MD (Yield) | 4.4 | -- | % | ISO 527-3 |
Impact
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<th>Conditioned</th>
<th>Unit</th>
<th>Test Method</th>
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</table>
Charpy Notched Impact Strength
-30°C | 20 | 17 | kJ/m² | ISO 179/1eA |
23°C | 80 | 110 | kJ/m² |
Charpy Unnotched Impact Strength (23°C)
No Break | No Break | kJ/m² | ISO 179/1eU |
Notched Izod Impact Strength
-40°C | 19 | 16 | kJ/m² |
23°C | 75 | 95 | kJ/m² |
<table>
<thead>
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<th>Impact</th>
<th>Test Method</th>
<th>Unit</th>
<th>Conditioned</th>
<th>Dry</th>
<th>Test Method</th>
<th>Unit</th>
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<td>Tensile Impact Strength (23°C)</td>
<td>ISO 8256/1</td>
<td>kJ/m²</td>
<td>600</td>
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<td>Hardness</td>
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<td>Ball Indentation Hardness (H 358/30)</td>
<td>ISO 2039-1</td>
<td>MPa</td>
<td>104</td>
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<td>Heat Deflection Temperature</td>
<td>ISO 75-2/B</td>
<td>°C</td>
<td>157</td>
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<td>Glass Transition Temperature</td>
<td>ISO 11357-2</td>
<td>°C</td>
<td>75.0</td>
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<td>Melting Temperature</td>
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<td>°C</td>
<td>262</td>
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<td>CLTE</td>
<td>ISO 11359-2</td>
<td>cm/cm/°C</td>
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<td>cm/cm/°C</td>
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<td>Comparative Tracking Index</td>
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<td>Burning Rate (1.00 mm)</td>
<td>ISO 3795</td>
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</table>

Notes

1. These links provide you with access to supplier literature. We work hard to keep them up to date; however you may find the most current literature from the supplier.

2. A UL Yellow Card contains UL-verified flammability and electrical characteristics. UL Prospector continually works to link Yellow Cards to individual plastic materials in Prospector, however this list may not include all of the appropriate links. It is important that you verify the association between these Yellow Cards and the plastic material found in Prospector. For a complete listing of Yellow Cards, visit the UL Yellow Card Search.

3. Typical properties: these are not to be construed as specifications.

4. 10°C/min
Where to Buy

Supplier
DuPont Performance Polymers
Wilmington, DE USA
Telephone: 302-999-4592
Web: http://plastics.dupont.com/

Distributor
Biesterfeld Plastic GmbH
Biesterfeld Plastic GmbH is a Pan European distribution company. Contact Biesterfeld Plastic GmbH for availability of individual products by country.
Telephone: +49-40-32008-0
Web: http://www.biesterfeld-plastic.com/
Availability: Algeria, Austria, Belgium, Bosnia and Herzegovina, Brazil, Bulgaria, Croatia, Cyprus, Czech Republic, Egypt, France, Germany, Greece, Hungary, Italy, Libyan Arab Jamahiriya, Luxembourg, Mauritania, Morocco, Netherlands, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Switzerland, Tunisia, Turkey

CCC Plastics
Telephone: 800-465-6917
Web: http://www.cccplastics.com/
Availability: Canada

PolyOne Distribution
PolyOne Distribution is a global distribution company. Contact PolyOne Distribution for availability of individual products by country.
Telephone: 800-894-4266
Web: http://polyonedistribution.com/
Availability: Global