PRODUCT PROFILE

Vydyne® J Series
Electrically neutral, non-corrosive PA66 resin

Ascend’s Vydyne J Series grades are heat stabilized, electrically neutral nylon 6,6 with superior melt flow properties and low plate-out technology for molding of thin wall parts. Their high dielectric strength and enhanced flow make J Series grades ideal for miniaturized electrical and automotive applications. Utilizing a unique organic heat stabilizer, J Series excels in 48-volt mild hybrid automotive systems that require corrosion resistant engineered plastics.
Vydyne® J Series

Product features:
- Heat stabilized and glass-filled PA66 resin
- Electrically neutral
- Prevents electrochemical corrosion
- Copper-free and halogen salt-free
- High flow
- Long-term thermal stability up to 155°C at 1,000 hours

Benefits:

Part performance
- Low corrosion for improved electrical contact performance
- Improved component safety for sensors and terminals
- High dielectric strength suitable for miniaturized applications
- Good dimensional stability and high strength for intricate components

Processing performance
- Improved flow leading to reduced cooling time
- Reduced cavity pressure and extended tool life
- Consistent color batch to batch allows good color uniformity and masterbatch coloration
- Direct laser markable and laser weldable

Applications:
- Connectors
- Housings
- Relays and sensors
- Air bag modules
- Lithium-ion battery trays
- Automotive control boxes
- Onboard charger components

High flow & low plate-out.
### Electrical Properties

J Series grades exhibit superior comparative tracking index (CTI) and dielectric strength compared to standard heat stabilized PA66.

<table>
<thead>
<tr>
<th>Property</th>
<th>Test Method</th>
<th>Units</th>
<th>R515J</th>
<th>R525J</th>
<th>R530J</th>
<th>R535J</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tensile Strain at Break (Dry)</td>
<td>ISO 527-2</td>
<td>%</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>2.8</td>
</tr>
<tr>
<td>Flexural Modulus (Dry)</td>
<td>ISO 178</td>
<td>MPa</td>
<td>5900</td>
<td>7700</td>
<td>9600</td>
<td>10500</td>
</tr>
<tr>
<td>Tensile Stress at Break (Dry)</td>
<td>ISO 527-2</td>
<td>MPa</td>
<td>120</td>
<td>174</td>
<td>195</td>
<td>209</td>
</tr>
<tr>
<td>Heat Deflection Temperature (HDT)</td>
<td>ISO 75-2/B</td>
<td>°C</td>
<td>258</td>
<td>258</td>
<td>260</td>
<td>261</td>
</tr>
<tr>
<td>Dielectric Strength</td>
<td>IEC 60243</td>
<td>kV/mm</td>
<td>24</td>
<td>24</td>
<td>24</td>
<td>20</td>
</tr>
<tr>
<td>Comparative Tracking Index (CTI)</td>
<td>IEC 60112</td>
<td>V</td>
<td>600</td>
<td>600</td>
<td>600</td>
<td>600</td>
</tr>
<tr>
<td>Volume Resistivity</td>
<td>IEC 60093</td>
<td>ohms-cm</td>
<td>1.0E+13</td>
<td>1.0E+13</td>
<td>1.0E+13</td>
<td>1.0E+14</td>
</tr>
</tbody>
</table>

![Graph showing CTI and Dielectric Strength comparison between Standardized heat stabilized PA66 and Vydyne J Series]
About Ascend

Ascend Performance Materials is the world’s largest fully integrated producer of nylon 6,6 resin. We manufacture and reliably supply world-class plastics, fibers and chemicals that are used in thousands of everyday applications such as car parts, electronics and cable ties.

North America
1010 Travis Street, Suite 900
Houston, TX 77002
United States
+1 713 315 5700

Europe
Watson & Crick Hill Park
Rue Granbonpré 11 – Bâtiment H
B-1435 Mont-Saint-Guibert
Belgium
+32 10 608 600

Asia
Unit 3602,
Raffles City Office Towers
268 Xi Zang Road (M)
Shanghai 200001
China
+86 21 2315 0888

For more information, contact our expert applications specialists or visit ascendmaterials.com.