

**Vydyne® B 1515 GFB BK EST**

 Ascend Performance Materials Operations LLC - *Polyamide 6*
**General Information**
**Product Description**

Vydyne B 1515 GFB BK EST is standard flow, 15% glass-fiber and 15% glass-beads reinforced PA6 resin. This product is also lubricated for improved machine feed and flow and it has a good surface aesthetic properties

**General**

|                        |   |
|------------------------|---|
| Material Status        | • Commercial: Active  |
| Availability           | • Asia Pacific • Europe • North America   |
| Filler / Reinforcement | • Glass Bead\Glass Fiber, 30% Filler by Weight  |
| Additive               | • Lubricant • Nucleating Agent  |
| Features               | <ul style="list-style-type: none"> <li>• Balanced</li> <li>• Stiffness/Toughness</li> <li>• Bromine Free</li> <li>• Chemical Resistant</li> <li>• Fast Molding Cycle</li> <li>• General Purpose</li> <li>• Good Color Stability</li> <li>• Good Impact Resistance</li> <li>• Good Mold Release</li> <li>• Good Processability</li> <li>• Good Rigidity</li> <li>• Good Stiffness</li> <li>• Good Strength</li> <li>• Good Surface Finish</li> <li>• Good Tensile Strength</li> <li>• Good Thermal Stability</li> <li>• Good Toughness</li> <li>• Halogen Free</li> <li>• High Flow</li> <li>• Highly Crystalline</li> <li>• Homopolymer</li> <li>• Low Viscosity</li> <li>• Lubricated</li> <li>• Non-Corrosive</li> <li>• Nucleated</li> </ul> |
| Agency Ratings         | • ISO 1043 PA6 (GF+GB)30  |
| Appearance             | • Black   |
| Forms                  | • Pellets   |
| Processing Method      | • Injection Molding   |
| Resin ID               | • PA6-(GF+GB)30   |

**Properties <sup>1</sup>**

|   | Nominal Value | Unit                  | Test Method    |
|---|---------------|-----------------------|----------------|
| <b>Physical</b>   |               |                       |                |
| Density   | 1.36          | g/cm <sup>3</sup>     | ISO 1183       |
| Molding Shrinkage                                       |               |                       | ISO 294-4      |
| Across Flow : 73°F, 0.0787 in                           | 1.1           | %                     |                |
| Flow : 73°F, 0.0787 in                                  | 0.80          | %                     |                |
| Water Absorption (Equilibrium, 73°F, 50% RH)            | 2.1           | %                     | ISO 62         |
| <b>Mechanical</b>                                       |               |                       |                |
| Tensile Modulus (73°F)                                  | 943000        | psi                   | ISO 527-1      |
| Tensile Stress (Break, 73°F)                            | 13800         | psi                   | ISO 527-2      |
| Tensile Strain (Break, 73°F)                            | 3.5           | %                     | ISO 527-2      |
| <b>Impact</b>   |               |                       |                |
| Notched Izod Impact Strength (73°F)                     | 2.6           | ft·lb/in <sup>2</sup> | ISO 180/1A     |
| <b>Thermal</b>  |               |                       |                |
| Deflection Temperature Under Load (66 psi, Unannealed)  | 392           | °F                    | ISO 75-2/B     |
| Deflection Temperature Under Load (264 psi, Unannealed) | 338           | °F                    | ISO 75-2/A     |
| Melting Temperature                                     | 432           | °F                    | ISO 11357-3    |
| <b>Electrical</b>                                       |               |                       |                |
| Comparative Tracking Index (0.118 in)                   | 600           | V                     | IEC 60112      |
| <b>Flammability</b>                                     |               |                       |                |
| Flame Rating  |               |                       | UL 94          |
| 0.06 in   |               | HB                    |                |
| 0.13 in   |               | HB                    |                |
| Glow Wire Flammability Index (0.08 in)                  | 1200          | °F                    | IEC 60695-2-12 |

**Processing Information**

| Injection | Nominal Value | Unit |
|-----------|---------------|------|
|-----------|---------------|------|



|                        |               |
|------------------------|---------------|
| Drying Temperature     | 176 to 230 °F |
| Drying Time            | 3.0 to 4.0 hr |
| Rear Temperature       | 446 to 491 °F |
| Middle Temperature     | 455 to 500 °F |
| Front Temperature      | 464 to 500 °F |
| Nozzle Temperature     | 464 to 500 °F |
| Processing (Melt) Temp | 464 to 500 °F |
| Mold Temperature       | 158 to 203 °F |

#### Notes

<sup>1</sup> Typical properties: these are not to be construed as specifications.

