

## Amodel® A-1130 FW

## polyphthalamide

Amodel® A-1130 FW is a 30% glass-fiber reinforced polyphthalamide (PPA) grade containing a solid lubricant. This resin was designed for moderate-

pressure, low-velocity friction and wear applications.

• Black: A-1130 FW BK 324

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| Material Status             | <ul> <li>Commercial: Active</li> </ul>   |  |                     |
|-----------------------------|--|--|---------------------|
| Availability                | <ul><li> Africa &amp; Middle East</li><li> Asia Pacific</li><li> Europe</li></ul>                                      | <ul><li>Latin America</li><li>North America</li></ul>                      |                     |
| Filler / Reinforcement      | <ul> <li>Glass Fiber, 30% Filler by We</li> </ul>  | ight   |                     |
| Additive                    | <ul> <li>PTFE Lubricant</li> </ul>   |  |                     |
| Features                    | <ul><li>Chemical Resistant</li><li>Creep Resistant</li><li>Good Dimensional Stability</li><li>Good Stiffness</li></ul> | <ul><li>High Strength</li><li>Low Friction</li><li>Wear Resistan</li></ul> | t                   |
| Uses                        | <ul><li>Bearings</li><li>Bushings</li></ul>  | <ul><li>Filters</li><li>Gears</li></ul>                                    |                     |
| RoHS Compliance             | • RoHS Compliant   |  |                     |
| Automotive Specifications   | • ASTM D6779 PA1270G30   | • ISO 1874-PA6T,<br>GF30   | /6I/66, MH, 11-110, |
| Appearance                  | • Black  |  |                     |
| Forms                       | • Pellets  |  |                     |
| Processing Method           | Injection Molding  |  |                     |
| Physical                    | Ту   | pical Value Unit   | Test method         |
| Density                     |  | 1.55 g/cm³   | ISO 1183/A          |
| Mechanical                  | Ту   | pical Value Unit   | Test method         |
| Tensile Modulus             |  | 11200 MPa  | ISO 527-1           |
| Tensile Stress (Break)      |  | 187 MPa  | ISO 527-2           |
| Tensile Strain (Break)      |  | 2.0 %  | ISO 527-2           |
| Flexural Modulus            |  | 9580 MPa   | ISO 178             |
| Flexural Stress             |  | 252 MPa  | ISO 178             |
| Thermal                     | Ту   | pical Value Unit   | Test method         |
| Deflection Temperature Unde |  |  | ISO 75-2/A          |
| 1.8 MPa, Unannealed         |  | 285 °C   |                     |
| Melting Temperature         |  | 313 °C   | ISO 11357-3         |
|                             |  |  |                     |

# Amodel® A-1130 FW polyphthalamide

| Injection              | Typical Value Unit |  |
|------------------------|--------------------|--|
| Drying Temperature     | 110 °C             |  |
| Drying Time            | 4.0 hr             |  |
| Suggested Max Moisture | 0.030 to 0.060 %   |  |
| Rear Temperature       | 304 to 318 °C      |  |
| Front Temperature      | 316 to 329 °C      |  |
| Processing (Melt) Temp | 329 to 343 °C      |  |
| Mold Temperature       | 135 °C             |  |

#### **Injection Notes**

#### Storage:

 Amodel® PPA compounds are shipped in moisture-resistant packages at moisture levels according to specifications. Sealed, undamaged bags should be preferably stored in a dry room at a maximum temperature of 50°C (122°F) and should be protected from possible damage. If only a portion of a package is used, the remaining material should be transferred into a sealable container. It is recommended that Amodel® PPA resins be dried prior to molding following the recommendations found in this datasheet and/or in the Amodel® PPA processing guide.

#### **Notes**

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

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