

# DYNAMID DYN-RN66G35 HSL BK

Polyamide 66  
Dynamic Polymer Solutions

| Technical Data                                                                                              |                                                 |                                   |              |
|-------------------------------------------------------------------------------------------------------------|-------------------------------------------------|-----------------------------------|--------------|
| Product Description                                                                                         |                                                 |                                   |              |
| Polyamide 66, 35% glass fiber reinforced, heat stabilized & lubricated black Produced with recycled content |                                                 |                                   |              |
| General                                                                                                     |                                                 |                                   |              |
| Material Status                                                                                             | • Commercial: Active                            |                                   |              |
| Literature <sup>1</sup>                                                                                     | • <a href="#">Technical Datasheet (English)</a> |                                   |              |
| Availability                                                                                                | • North America                                 |                                   |              |
| Filler / Reinforcement                                                                                      | • Glass Fiber, 35% Filler by Weight             |                                   |              |
| Additive                                                                                                    | • Heat Stabilizer                               | • Lubricant                       |              |
| Recycled Content                                                                                            | • Yes                                           |                                   |              |
| Features                                                                                                    | • Good Stiffness<br>• Good Strength             | • Heat Stabilized<br>• Lubricated |              |
| Appearance                                                                                                  | • Black                                         |                                   |              |
| Processing Method                                                                                           | • Injection Molding                             |                                   |              |
|                                                                                                             |                                                 |                                   |              |
| Physical                                                                                                    | Nominal Value (English)                         | Nominal Value (SI)                | Test Method  |
| Density / Specific Gravity                                                                                  |                                                 |                                   |              |
| --                                                                                                          | 1.40                                            | 1.40 g/cm³                        | ASTM D792    |
| 73°F (23°C)                                                                                                 | 1.40 g/cm³                                      | 1.40 g/cm³                        | ISO 1183     |
| Mechanical                                                                                                  | Nominal Value (English)                         | Nominal Value (SI)                | Test Method  |
| Tensile Modulus                                                                                             |                                                 |                                   |              |
| -- <sup>3</sup>                                                                                             | 1.35E+6 psi                                     | 9310 MPa                          | ASTM D638    |
| --                                                                                                          | 1.35E+6 psi                                     | 9310 MPa                          | ISO 527-1/10 |
| Tensile Strength                                                                                            |                                                 |                                   |              |
| Yield <sup>4</sup>                                                                                          | 25600 psi                                       | 177 MPa                           | ASTM D638    |
| Yield                                                                                                       | 25400 psi                                       | 175 MPa                           | ISO 527-2/50 |
| Tensile Elongation                                                                                          |                                                 |                                   |              |
| Break <sup>4</sup>                                                                                          | 3.8 %                                           | 3.8 %                             | ASTM D638    |
| Break                                                                                                       | 2.8 %                                           | 2.8 %                             | ISO 527-2/50 |
| Flexural Modulus <sup>5</sup>                                                                               |                                                 |                                   |              |
| --                                                                                                          | 1.18E+6 psi                                     | 8160 MPa                          | ASTM D790    |
| --                                                                                                          | 1.19E+6 psi                                     | 8240 MPa                          | ISO 178      |
| Flexural Strength <sup>5</sup>                                                                              |                                                 |                                   |              |
| --                                                                                                          | 33200 psi                                       | 229 MPa                           | ASTM D790    |
| --                                                                                                          | 37700 psi                                       | 260 MPa                           | ISO 178      |
| Impact                                                                                                      | Nominal Value (English)                         | Nominal Value (SI)                | Test Method  |
| Charpy Notched Impact Strength (73°F (23°C))                                                                | 3.0 ft·lb/in²                                   | 6.2 kJ/m²                         | ISO 179      |
| Notched Izod Impact                                                                                         |                                                 |                                   |              |
| 73°F (23°C)                                                                                                 | 1.4 ft·lb/in                                    | 75 J/m                            | ASTM D256    |
| 73°F (23°C)                                                                                                 | 4.0 ft·lb/in²                                   | 8.4 kJ/m²                         | ISO 180      |



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| Thermal                           | Nominal Value (English) | Nominal Value (SI) | Test Method            |
|-----------------------------------|-------------------------|--------------------|------------------------|
| Deflection Temperature Under Load |                         |                    |                        |
| 66 psi (0.45 MPa), Unannealed     | 471 °F                  | 244 °C             | ASTM D648              |
| 66 psi (0.45 MPa), Unannealed     | 495 °F                  | 257 °C             | ISO 75-2/B             |
| 264 psi (1.8 MPa), Unannealed     | 469 °F                  | 243 °C             | ASTM D648              |
| 264 psi (1.8 MPa), Unannealed     | 480 °F                  | 249 °C             | ISO 75-2/A             |
| Peak Melting Temperature          | 504 °F                  | 262 °C             | ASTM D3418<br>ISO 3146 |

| Injection              | Nominal Value (English) | Nominal Value (SI) |
|------------------------|-------------------------|--------------------|
| Drying Temperature     | 194 to 230 °F           | 90 to 110 °C       |
| Drying Time            | 3.0 to 5.0 hr           | 3.0 to 5.0 hr      |
| Suggested Max Moisture | < 0.15 %                | < 0.15 %           |
| Processing (Melt) Temp | 527 to 572 °F           | 275 to 300 °C      |
| Mold Temperature       | 131 to 176 °F           | 55 to 80 °C        |
| Injection Rate         | Fast                    | Fast               |
| Back Pressure          | 80.0 to 140 psi         | 0.552 to 0.965 MPa |

Notes

- <sup>1</sup> 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.
- <sup>2</sup> Typical properties: these are not to be construed as specifications.
- <sup>3</sup> 0.39 in/min (10 mm/min)
- <sup>4</sup> 2.0 in/min (50 mm/min)
- <sup>5</sup> 0.20 in/min (5.0 mm/min)

