

# Bergamid™ A80 Natural SO

## Polyamide 6 + PA 66/6

### Key Characteristics

| General               |                      |                     |
|-----------------------|----------------------|---------------------|
| Material Status       | • Commercial: Active |                     |
| Regional Availability | • Europe             |                     |
| Features              | • High Viscosity     |                     |
| RoHS Compliance       | • RoHS Compliant     |                     |
| Appearance            | • Natural Color      |                     |
| Forms                 | • Pellets            |                     |
| Processing Method     | • Extrusion          | • Injection Molding |

### Technical Properties <sup>1</sup>

| Physical                                                           | Typical Value (English)   | Typical Value (SI)     | Test Method     |
|--------------------------------------------------------------------|---------------------------|------------------------|-----------------|
| Density                                                            | 1.13 g/cm <sup>3</sup>    | 1.13 g/cm <sup>3</sup> | ISO 1183        |
| K-Value                                                            | 85.0                      | 85.0                   | Internal Method |
| Mechanical                                                         | Typical Value (English)   | Typical Value (SI)     | Test Method     |
| Tensile Modulus                                                    | 435000 psi                | 3000 MPa               | ISO 527-1       |
| Tensile Stress (Break)                                             | 13100 psi                 | 90.0 MPa               | ISO 527-2       |
| Tensile Strain (Yield)                                             | 4.5 %                     | 4.5 %                  | ISO 527-2       |
| Tensile Strain (Break)                                             | 25 %                      | 25 %                   | ISO 527-2       |
| Flexural Modulus                                                   | 377000 psi                | 2600 MPa               | ISO 178         |
| Flexural Stress                                                    | 15200 psi                 | 105 MPa                | ISO 178         |
| Impact                                                             | Typical Value (English)   | Typical Value (SI)     | Test Method     |
| Charpy Notched Impact Strength<br>(73°F (23°C))                    | 1.4 ft·lb/in <sup>2</sup> | 3.0 kJ/m <sup>2</sup>  | ISO 179/1eA     |
| Charpy Unnotched Impact Strength<br>73°F (23°C)                    | No Break                  | No Break               | ISO 179/1eU     |
| Thermal                                                            | Typical Value (English)   | Typical Value (SI)     | Test Method     |
| Deflection Temperature Under Load<br>66 psi (0.45 MPa), Unannealed | 365 °F                    | 185 °C                 | ISO 75-2/B      |
| Deflection Temperature Under Load<br>264 psi (1.8 MPa), Unannealed | 147 °F                    | 64.0 °C                | ISO 75-2/A      |
| Flammability                                                       | Typical Value (English)   | Typical Value (SI)     | Test Method     |
| FMVSS Flammability                                                 | < 3.9 in/min              | < 100 mm/min           | DIN 75200       |

### Processing Information

| Injection              | Typical Value (English) | Typical Value (SI) |
|------------------------|-------------------------|--------------------|
| Drying Temperature     | 176 °F                  | 80 °C              |
| Drying Time            | 4.0 hr                  | 4.0 hr             |
| Processing (Melt) Temp | 518 to 554 °F           | 270 to 290 °C      |
| Mold Temperature       | 104 to 176 °F           | 40 to 80 °C        |
| Holding Pressure       | 7250 to 14500 psi       | 50.0 to 100 MPa    |

### Notes

<sup>1</sup> Typical values are not to be construed as specifications.

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