



# Bergamid™ A700 G25 U-SO

## Polyamide 66

### Key Characteristics

| General                |                                     |                |                   |
|------------------------|-------------------------------------|----------------|-------------------|
| Material Status        | • Commercial: Active                |                |                   |
| Regional Availability  | • Africa & Middle East              | • Asia Pacific | • Europe          |
| Filler / Reinforcement | • Glass Fiber, 25% Filler by Weight |                |                   |
| Additive               | • Heat Stabilizer                   |                |                   |
| Features               | • Flame Retardant                   | • Halogen Free | • Heat Stabilized |
| RoHS Compliance        | • RoHS Compliant                    |                |                   |
| Forms                  | • Pellets                           |                |                   |

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

| Physical                                    | Typical Value (English)   | Typical Value (SI)     | Test Method     |
|---|---------------------------|------------------------|-----------------|
| Density <sup>2</sup>                        | 1.38 g/cm <sup>3</sup>    | 1.38 g/cm <sup>3</sup> | DIN 53479       |
| Ash Content                                 | 25 %                      | 25 %                   | ISO 3451        |
| Mechanical                                  | Typical Value (English)   | Typical Value (SI)     | Test Method     |
| Tensile Modulus (73°F (23°C))               | 1.23E+6 psi               | 8500 MPa               | ISO 527-2/1     |
| Tensile Stress (Break, 73°F (23°C))         | 23200 psi                 | 160 MPa                | ISO 527-2/5     |
| Tensile Strain (Break, 73°F (23°C))         | 3.0 %                     | 3.0 %                  | ISO 527-2/5     |
| Impact                                      | Typical Value (English)   | Typical Value (SI)     | Test Method     |
| Charpy Notched Impact Strength              |                           |                        | ISO 179/1eA     |
| -22°F (-30°C)                               | 4.3 ft·lb/in <sup>2</sup> | 9.0 kJ/m <sup>2</sup>  |                 |
| 73°F (23°C)                                 | 5.7 ft·lb/in <sup>2</sup> | 12 kJ/m <sup>2</sup>   |                 |
| Charpy Unnotched Impact Strength            |                           |                        | ISO 179/1eA     |
| -22°F (-30°C)                               | 29 ft·lb/in <sup>2</sup>  | 60 kJ/m <sup>2</sup>   |                 |
| 73°F (23°C) <sup>3</sup>                    | 31 ft·lb/in <sup>2</sup>  | 65 kJ/m <sup>2</sup>   |                 |
| Thermal                                     | Typical Value (English)   | Typical Value (SI)     | Test Method     |
| Heat Deflection Temperature                 |                           |                        | ISO 75-2/B      |
| 66 psi (0.45 MPa), Unannealed               | 482 °F                    | 250 °C                 |                 |
| Maximum Use Temperature                     |                           |                        | IEC 60216       |
| -- <sup>4</sup>                             | 248 °F                    | 120 °C                 |                 |
| Short Time                                  | 428 °F                    | 220 °C                 |                 |
| Melting Temperature (DSC)                   | 502 °F                    | 261 °C                 | ISO 3146        |
| Electrical                                  | Typical Value (English)   | Typical Value (SI)     | Test Method     |
| Surface Resistivity                         | 1.0E+13 ohms              | 1.0E+13 ohms           | IEC 60093       |
| Volume Resistivity                          | 1.0E+15 ohms·cm           | 1.0E+15 ohms·cm        | IEC 60093       |
| Electric Strength                           | 2000 V/mil                | 80 kV/mm               | IEC 60243-1     |
| Relative Permittivity (1 MHz)               | 3.50                      | 3.50                   | IEC 60250       |
| Dissipation Factor (1 MHz)                  | 0.015                     | 0.015                  | IEC 60250       |
| Comparative Tracking Index (Solution A)     | 400 to 550 V              | 400 to 550 V           | IEC 60112       |
| Flammability                                | Typical Value (English)   | Typical Value (SI)     | Test Method     |
| Flame Rating                                |                           |                        | Internal Method |
| 0.06 to 0.12 in (1.5 to 3.0 mm), ALL        | V-0                       | V-0                    |                 |
| Glow Wire Ignition Temperature <sup>5</sup> |                           |                        | IEC 60695-2-13  |
| 0.12 in (3.0 mm)                            | 1760 °F                   | 960 °C                 |                 |

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**Notes**<sup>1</sup> Typical values are not to be construed as specifications.<sup>2</sup> ±0.02 g/cm<sup>3</sup><sup>3</sup> Type 1<sup>4</sup> Continuous (GTP 50% Tensile)<sup>5</sup> 0.8 mm wire**CONTACT INFORMATION****Americas**United States - Avon Lake  
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