



# Bergamid™ A70 G15 black VN4255CF LS TM-Z

## Polyamide 66

### Key Characteristics

General	
Material Status	• Commercial: Active
Regional Availability	• Africa & Middle East • Europe • Asia Pacific • Latin America • North America
Filler / Reinforcement	• Glass Fiber, 15% Filler by Weight
Additive	• Impact Modifier
Features	• Laser Markable
Forms	• Granules

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

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Density <sup>2</sup> (73°F (23°C))	1.21 g/cm <sup>3</sup>	1.21 g/cm <sup>3</sup>	ISO 1183
Molding Shrinkage - Flow <sup>3</sup> 73°F (23°C), 0.157 in (4.00 mm)	3.0E-3 to 7.0E-3 in/in	0.30 to 0.70 %	ASTM D955
Mechanical	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Modulus (73°F (23°C))	783000 psi	5400 MPa	ISO 527-2/1
Tensile Stress (Break, 73°F (23°C))	16000 psi	110 MPa	ISO 527-2
Tensile Strain (Break, 73°F (23°C))	> 5.0 %	> 5.0 %	ISO 527-2
Flexural Modulus (73°F (23°C))	580000 psi	4000 MPa	ISO 178
Flexural Stress (73°F (23°C))	18400 psi	127 MPa	ISO 178
Impact	Typical Value (English)	Typical Value (SI)	Test Method
Charpy Notched Impact Strength			ISO 179
-22°F (-30°C)	2.1 ft·lb/in <sup>2</sup>	4.5 kJ/m <sup>2</sup>	
73°F (23°C)	6.7 ft·lb/in <sup>2</sup>	14 kJ/m <sup>2</sup>	
Charpy Unnotched Impact Strength			ISO 179
-22°F (-30°C)	33 ft·lb/in <sup>2</sup>	69 kJ/m <sup>2</sup>	
73°F (23°C)	33 ft·lb/in <sup>2</sup>	70 kJ/m <sup>2</sup>	
Thermal	Typical Value (English)	Typical Value (SI)	Test Method
Heat Deflection Temperature 66 psi (0.45 MPa), Unannealed	493 °F	256 °C	ISO 75-2/B
Heat Deflection Temperature 264 psi (1.8 MPa), Unannealed	457 °F	236 °C	ISO 75-2/A
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

### Processing Information

Injection	Typical Value (English)	Typical Value (SI)
Drying Temperature	176 °F	80 °C
Drying Time	4.0 hr	4.0 hr
Rear Temperature	518 °F	270 °C
Middle Temperature	536 °F	280 °C

Injection	Typical Value (English)	Typical Value (SI)
Front Temperature	554 °F	290 °C
Nozzle Temperature	572 °F	300 °C
Mold Temperature	104 to 176 °F	40 to 80 °C

**Notes**

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

<sup>2</sup> ±0.02

<sup>3</sup> Bergmann method