

Technical Data Sheet

**Vitamide BF10**

Polyamide 6
LyondellBasell Industries
Engineering Plastics

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Additive	• Flame Retardant		
Features	• Flame Retardant		
Uses	• Connectors	• Electrical Parts	• Plugs
Processing Method	• Injection Molding		

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	1.13 g/cm ³	1.13 g/cm ³	ISO 1183
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Stress (Yield)	10900 psi	75.0 MPa	ISO 527-2
Tensile Strain (Break)	75 %	75 %	ISO 527-2
Flexural Modulus	377000 psi	2600 MPa	ISO 178
Flexural Stress	13800 psi	95.0 MPa	ISO 178
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Notched Izod Impact Strength	2.9 ft·lb/in ²	6.0 kJ/m ²	ISO 180
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load			
66 psi (0.45 MPa), Unannealed	365 °F	185 °C	ISO 75-2/B
264 psi (1.8 MPa), Unannealed	140 °F	60.0 °C	ISO 75-2/A
Melting Temperature (DSC)	430 °F	221 °C	ISO 3146
Electrical	Nominal Value (English)	Nominal Value (SI)	Test Method
Surface Resistivity	1.0E+15 ohms	1.0E+15 ohms	IEC 60093
Electric Strength (0.0787 in (2.00 mm))	530 V/mil	21 kV/mm	IEC 60243-1
Comparative Tracking Index (Solution A)	600 V	600 V	IEC 60112
Flammability	Nominal Value (English)	Nominal Value (SI)	Test Method
Burning Rate			
0.0787 in (2.00 mm)	< 3.9 in/min	< 100 mm/min	ISO 3795
0.0787 in (2.00 mm)	< 3.9 in/min	< 100 mm/min	FMVSS 302
Flame Rating	V-2	V-2	UL 94
Glow Wire Ignition Temperature	1380 °F	750 °C	IEC 60695-2-13

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Injection	Nominal Value (English)	Nominal Value (SI)
Drying Temperature	176 °F	80 °C
Drying Time	4.0 to 6.0 hr	4.0 to 6.0 hr
Processing (Melt) Temp	446 to 500 °F	230 to 260 °C
Mold Temperature	140 to 194 °F	60 to 90 °C

Notes

These are typical property values not to be construed as specification limits.

Processing Techniques

Specific recommendations for resin type and processing conditions can only be made when the end use, required properties and fabrication equipment are known.

Product Storage and Handling

- Product should be stored in dry conditions at temperatures below 50°C and protected from UV-light
- Improper storage may bring damage to the packaging and can negatively affects on the quality of this product
- Keep material completely dry for good processing

Company Information

For further information regarding the LyondellBasell company, please visit <http://www.lyb.com/>.

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