

Technical Data Sheet

**Vitamide AI12**

Polyamide 66
LyondellBasell Industries
Engineering Plastics

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• High Impact Resistance		
Uses	• Closures	• Machine/Mechanical Parts	
Processing Method	• Injection Molding		

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	1.11 g/cm ³	1.11 g/cm ³	ISO 1183
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Stress (Yield)	10200 psi	70.0 MPa	ISO 527-2
Tensile Strain (Break)	35 %	35 %	ISO 527-2
Flexural Modulus	247000 psi	1700 MPa	ISO 178
Flexural Stress	12300 psi	85.0 MPa	ISO 178
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Notched Izod Impact Strength	7.1 ft·lb/in ²	15 kJ/m ²	ISO 180
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load			
66 psi (0.45 MPa), Unannealed	356 °F	180 °C	ISO 75-2/B
264 psi (1.8 MPa), Unannealed	149 °F	65.0 °C	ISO 75-2/A
Melting Temperature (DSC)	482 °F	250 °C	ISO 3146
Flammability	Nominal Value (English)	Nominal Value (SI)	Test Method
Flame Rating	HB	HB	UL 94

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Injection	Nominal Value (English)	Nominal Value (SI)
Drying Temperature	176 °F	80 °C
Drying Time	3.0 to 4.0 hr	3.0 to 4.0 hr
Processing (Melt) Temp	518 to 554 °F	270 to 290 °C
Mold Temperature	140 to 212 °F	60 to 100 °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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