

Technical Data Sheet

**Matrixx 55N6006**

Polycarbonate
LyondellBasell Industries
Engineering Plastics

Product Description

Flame Retardant, V-0/5VA, Polycarbonate

General

Material Status	• Commercial: Active
Availability	• North America
Additive	• Flame Retardant
Features	• Flame Retardant
Forms	• Pellets

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density / Specific Gravity	1.21	1.21 g/cm ³	ASTM D792
Melt Mass-Flow Rate (MFR) (300°C/1.2 kg)	10 g/10 min	10 g/10 min	ASTM D1238
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Modulus	348000 psi	2400 MPa	ASTM D638
Tensile Strength			ASTM D638
Yield	8800 psi	60.7 MPa	
Break	8120 psi	56.0 MPa	
Flexural Modulus - Chord	363000 psi	2500 MPa	ASTM D790
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Notched Izod Impact			ASTM D256
-22°F (-30°C)	2.3 ft·lb/in	120 J/m	
73°F (23°C)	10 ft·lb/in	530 J/m	
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load			ASTM D648
66 psi (0.45 MPa), Unannealed	275 °F	135 °C	
264 psi (1.8 MPa), Unannealed	252 °F	122 °C	
Flammability	Nominal Value (English)	Nominal Value (SI)	Test Method
Flame Rating			UL 94
0.06 in (1.5 mm)	V-0	V-0	
0.10 in (2.5 mm)	• V-0	• V-0	
	• 5VA	• 5VA	
0.12 in (3.0 mm)	• V-0	• V-0	
	• 5VA	• 5VA	

Additional Information

The value listed as Mold Shrinkage, ASTM D955, was tested in accordance with Matrixx test methods.

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Injection	Nominal Value (English)	Nominal Value (SI)
Drying Temperature	250 °F	121 °C
Drying Time	4.0 hr	4.0 hr
Rear Temperature	480 to 570 °F	249 to 299 °C
Middle Temperature	480 to 570 °F	249 to 299 °C
Front Temperature	480 to 570 °F	249 to 299 °C
Processing (Melt) Temp	540 to 570 °F	282 to 299 °C
Mold Temperature	160 to 220 °F	71 to 104 °C
Injection Rate	Slow-Moderate	Slow-Moderate
Back Pressure	50.0 to 100 psi	0.345 to 0.689 MPa
Screw Speed	40 to 75 rpm	40 to 75 rpm
Cushion	0.250 to 0.500 in	6.35 to 12.7 mm

Injection Notes

-20°F Dewpoint

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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