

Polyaxis PD 2000R

Polypropylene Copolymer

LyondellBasell Industries

Rotomolding

Product Description

Polyaxis PD 2000R is a polypropylene specifically designed for rotational molding.

General

Material Status	• Commercial: Active		
Availability	• North America		
Additive	• UV Stabilizer: No		
Uses	• Bottles	• Containers	• High Temperature Applications
Appearance	• Natural Color		
Forms	• Pellets	• Powder	
Processing Method	• Rotational Molding		

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density / Specific Gravity ¹	0.902	0.900 g/cm ³	ASTM D792
Melt Mass-Flow Rate (MFR) (230°C/2.16 kg)	20 g/10 min	20 g/10 min	ASTM D1238
Environmental Stress-Cracking Resistance (ESCR)			ASTM D1693
100% Igepal, Compression Molded, F50	> 1000 hr	> 1000 hr	
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Strength ² (Yield, Rotational Molded)	3760 psi	25.9 MPa	ASTM D638
Tensile Elongation ²			ASTM D638
Break, Rotational Molded	40 %	40 %	
Flexural Modulus - 1% Secant (Rotational Molded)	187000 psi	1290 MPa	ASTM D790
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Impact Strength			ARM
73°F (23°C), 0.125 in (3.18 mm), Rotational Molded	15 ft·lb	20 J	
73°F (23°C), 0.250 in (6.35 mm), Rotational Molded	15 ft·lb	20 J	
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load			ASTM D648
66 psi (0.45 MPa), Unannealed, Rotational Molded	221 °F	105 °C	
264 psi (1.8 MPa), Unannealed, 0.125 in (3.18 mm), Rotational Molded	121 °F	49.6 °C	

Notes

¹ Compression Molded

² 2.0 in/min (51 mm/min)

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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