

Technical Data Sheet

Polyaxis PD 2000R

Polypropylene Copolymer
LyondellBasell Industries
Rotomolding

Product Description

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

General

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
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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) 100% Igepal, Compression Molded, F50	> 1000 hr	> 1000 hr	ASTM D1693

Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
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Tensile Strength ² (Yield, Rotational Molded)	3760 psi	25.9 MPa	ASTM D638
Tensile Elongation ² Break, Rotational Molded	40 %	40 %	ASTM D638
Flexural Modulus - 1% Secant (Rotational Molded)	187000 psi	1290 MPa	ASTM D790

Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
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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
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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.