

Technical Data Sheet



Polyaxis PD 3000

Polypropylene Copolymer
LyondellBasell Industries
Rotomolding

Product Description

Polyaxis PD 3000 is a polypropylene specifically designed for rotational molding. A long term UV package and robust antioxidant system allow this material to be used in a variety of applications.

General

Material Status	• Commercial: Active	
Availability	• North America	
Additive	• Long Term UV-15 Stabilizer: Yes	
Uses	• Automotive Under the Hood • Bottles	• Containers • High Temperature Applications
Appearance	• Black	• 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) 100% Igepal, Compression Molded, F50	> 1000 hr	> 1000 hr	ASTM D1693
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 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
Impact Strength 73°F (23°C), 0.125 in (3.18 mm), Rotational Molded	15 ft·lb	20 J	ARM
73°F (23°C), 0.250 in (6.35 mm), Rotational Molded	20 ft·lb	27 J	
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load 66 psi (0.45 MPa), Unannealed, Rotational Molded	221 °F	105 °C	ASTM D648
264 psi (1.8 MPa), Unannealed, 0.125 in (3.18 mm), Rotational Molded	122 °F	49.9 °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

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