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		
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/cm³	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	20 ft·lb	27 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	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.