

Technical Data Sheet

Polyaxis RLLP 626 (FR V-0 Rated)

High Density Polyethylene
LyondellBasell Industries
Rotomolding

Product Description

PolyAxis RLLP 626 is a high density polyethylene V-0 flame retardant resin intended for the rotational molding industry. This material is approved for V-0 at 0.157" (4mm) and 0.236" (6mm).

General

Features	• Flame Retardant		
Appearance	• Colors Available	• White	
Forms	• Powder		
Processing Method	• Rotational Molding		

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density / Specific Gravity ¹	> 1.10	> 1.10 g/cm ³	ASTM D792
Melt Mass-Flow Rate (MFR) (190°C/2.16 Kg)	5.0 g/10 min	5.0 g/10 min	ASTM D1238

Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Strength ² (Yield, Rotational Molded)	2300 psi	15.9 MPa	ASTM D638
Tensile Elongation ²			ASTM D638
Break, Rotational Molded	13 %	13 %	
Flexural Modulus - 1% Secant (Rotational Molded)	> 126000 psi	> 869 MPa	ASTM D790

Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Impact Strength			ARM
73°F (23°C), 0.157 In (4.00 Mm), Rotational Molded ³	> 35 ft·lb	> 47 J	
73°F (23°C), 0.236 In (6.00 Mm), Rotational Molded ⁴	> 45 ft·lb	> 61 J	

Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load			ASTM D648
66 Psi (0.45 Mpa), Unannealed, Rotational Molded	144 °F	62.0 °C	
264 Psi (1.8 Mpa), Unannealed, 0.125 In (3.18 Mm), Rotational Molded	98.6 °F	37.0 °C	

Flammability	Nominal Value (English)	Nominal Value (SI)	Test Method
Flame Rating			UL 94
0.16 In (4.0 Mm), Any Color ⁵	V-0	V-0	
0.24 In (6.0 Mm), Any Color ⁶	V-0	V-0	

Notes

¹ Compression Molded

² 2.0 in/min (51 mm/min)

³ -40° Impact is zero.
Poor cold impacts.

⁴ -40° Impact is zero.
Poor cold impacts

⁵ UL certified for 4mm + 10%

⁶ UL certified for 6mm + 10%

Notes

These are typical property values not to be construed as specification limits.