

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
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Density / Specific Gravity ¹	> 1.10	> 1.10 g/cm ³	ASTM D792
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Melt Mass-Flow Rate (MFR) (190°C/2.16 Kg)	5.0 g/10 min	5.0 g/10 min	ASTM D1238
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Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
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Tensile Strength ² (Yield, Rotational Molded)	2300 psi	15.9 MPa	ASTM D638
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Tensile Elongation ²			ASTM D638
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Break, Rotational Molded	13 %	13 %	
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Flexural Modulus - 1% Secant (Rotational Molded)	> 126000 psi	> 869 MPa	ASTM D790
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Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
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Impact Strength			ARM
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73°F (23°C), 0.157 In (4.00 Mm), Rotational Molded ³	> 35 ft·lb	> 47 J	
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73°F (23°C), 0.236 In (6.00 Mm), Rotational Molded ⁴	> 45 ft·lb	> 61 J	
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Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
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Deflection Temperature Under Load			ASTM D648
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66 Psi (0.45 Mpa), Unannealed, Rotational Molded	144 °F	62.0 °C	
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264 Psi (1.8 Mpa), Unannealed, 0.125 In (3.18 Mm), Rotational Molded	98.6 °F	37.0 °C	
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Flammability	Nominal Value (English)	Nominal Value (SI)	Test Method
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Flame Rating			UL 94
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0.16 In (4.0 Mm), Any Color ⁵	V-0	V-0	
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0.24 In (6.0 Mm), Any Color ⁶	V-0	V-0	
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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.