

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

Material Status	• Commercial: Active
Availability	• North America
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 Break, Rotational Molded	13 %	13 %	ASTM D638
Flexural Modulus - 1% Secant (Rotational Molded)	> 126000 psi	> 869 MPa	ASTM D790
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Impact Strength 73°F (23°C), 0.157 in (4.00 mm), Rotational Molded ³	> 35 ft·lb	> 47 J	ARM
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 66 psi (0.45 MPa), Unannealed, Rotational Molded	144 °F	62.0 °C	ASTM D648
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 0.16 in (4.0 mm), Any Color ⁵	V-0	V-0	UL 94
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.

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.

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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

For further information regarding the LyondellBasell company, please visit <http://www.lyb.com/>.

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