

Technical Data Sheet

**Icorene 3570**

Linear Low Density Polyethylene
LyondellBasell Industries
Rotomolding

Product Description

ICORENE® 3570 is a linear low density polyethylene for rotational molding applications such as high end coolers, toys, playgrounds, tanks, etc. The grade is UV stabilized and suitable for applications requiring good stiffness and processability. Very good mold surface finish.

General

Material Status	• Commercial: Active		
Availability	• North America		
Additive	• UV Stabilizer		
Features	• Good Toughness	• UV Resistant	
Uses	• General Purpose	• Outdoor Applications	• Sporting Goods
Appearance	• Colors Available		
Forms	• Powder		
Processing Method	• Rotational Molding		

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	0.935 g/cm ³	0.935 g/cm ³	ASTM D1505
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	6.8 g/10 min	6.8 g/10 min	ASTM D1238
Environmental Stress-Cracking Resistance (ESCR)			
10% Igepal, F50	50.0 hr	50.0 hr	ASTM D1693
100% Igepal, F50	> 1000 hr	> 1000 hr	ASTM D1693A
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Strength ¹ (Yield)	2650 psi	18.3 MPa	ASTM D638
Flexural Modulus - 1% Secant ²	101000 psi	696 MPa	ASTM D790
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Impact Strength			ARM
-40°F (-40°C), 0.125 in (3.18 mm), Rotational Molded	50 ft·lb	68 J	
-40°F (-40°C), 0.250 in (6.35 mm), Rotational Molded	190 ft·lb	258 J	
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load			ASTM D648
66 psi (0.45 MPa), Unannealed	135 °F	57.2 °C	
264 psi (1.8 MPa), Unannealed, 0.00492 in (0.125 mm), Rotational Molded	101 °F	38.6 °C	

Additional Information

Test data based on natural, unpigmented resin.

Notes

¹ 2.0 in/min (50 mm/min)

² 0.051 in/min (1.3 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

Technical Data Sheet



Icorene 3570

Linear Low Density Polyethylene
LyondellBasell Industries
Rotomolding

Company Information

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

© LyondellBasell Industries Holdings, B.V. 2024

Disclaimer

Information in this document is accurate to the best of our knowledge at the date of publication. The document is designed to provide users general information for safe handling, use, processing, storage, transportation, disposal and release and does not constitute any warranty or quality specification, either express or implied, including any warranty of merchantability or fitness for any particular purpose. Users shall determine whether the product is suitable for their use and can be used safely and legally.

In addition to any prohibitions of use specifically noted in this document, LyondellBasell may further prohibit or restrict the sale of its products into certain applications. For further information, please contact a LyondellBasell representative.

Trademarks

The Trademark referenced within the product name is owned or used by the LyondellBasell family of companies.