

Technical Data Sheet

**Icorene 3590**

Linear Low Density Polyethylene
LyondellBasell Industries
Rotomolding

Product Description

ICORENE® 3590 is a linear low density polyethylene specifically developed for rotational moulding.

This grade is a very fast processing material suitable for use in many different applications. It has a good balance of properties such as toughness, easy flow and stiffness.

General

Material Status	• Commercial: Active		
Availability	• Europe		
Additive	• UV Stabilizer		
Features	• General Purpose • Good Flow • Good Moldability	• Good Processability • Good Stiffness • Good Toughness	• UV Resistant
Uses	• General Purpose		
Appearance	• Natural Color	• Unspecified Color	
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)	9.0 g/10 min	9.0 g/10 min	ASTM D1238
Environmental Stress-Cracking Resistance (ESCR) 122°F (50°C), 100% Igepal, F50	> 150 hr	> 150 hr	ASTM D1693B
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Strength			ISO 527
Yield	2470 psi	17.0 MPa	
Break	2320 psi	16.0 MPa	
Flexural Modulus	79800 psi	550 MPa	ISO 178
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Drop Impact Resistance ¹ (-4°F (-20°C))	3.60 in·lb/mil	160 J/cm	Internal Method
Hardness	Nominal Value (English)	Nominal Value (SI)	Test Method
Durometer Hardness (Shore D)	53	53	ISO 868
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Vicat Softening Temperature	235 °F	113 °C	ISO 306/A
Melting Temperature	259 °F	126 °C	DSC

Notes

¹ Based on ISO 6603

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

Company Information

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

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