

Technical Data Sheet

**Icorene 1741**

High Density Polyethylene
LyondellBasell Industries
Rotomolding

Product Description

ICORENE® 1741 is a metallocene high density polyethylene specifically developed for use in rotational moulding.

This grade is designed for use in many different rotomoulding applications. It has good overall mouldability, high rigidity and very good toughness.

General

Material Status	• Commercial: Active		
Availability	• Europe		
Additive	• UV Stabilizer		
Features	• Good Impact Resistance • Good Moldability	• Good Toughness • High Rigidity	• UV Resistant
Uses	• Tanks	• Thick-walled Parts	
Appearance	• Natural Color	• Unspecified Color	
Forms	• Powder		
Processing Method	• Rotational Molding		

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	0.940 g/cm ³	0.940 g/cm ³	ASTM D1505
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	4.0 g/10 min	4.0 g/10 min	ASTM D1238
Environmental Stress-Cracking Resistance (ESCR)			ASTM D1693
122°F (50°C), 10% Igepal	300 hr	300 hr	
122°F (50°C), 100% Igepal	> 1000 hr	> 1000 hr	
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Strength			ISO 527-2
Yield	3050 psi	21.0 MPa	
Break	3050 psi	21.0 MPa	
Tensile Elongation (Break)	800 %	800 %	ISO 527-2
Flexural Modulus	116000 psi	800 MPa	ASTM D790
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Charpy Unnotched Impact Strength	> 71 ft·lb/in ²	> 150 kJ/m ²	ISO 179
Drop Impact Resistance ¹ (-4°F (-20°C))	4.72 in·lb/mil	210 J/cm	ASTM D4226
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load			ISO 75-2/B
66 psi (0.45 MPa), Unannealed	149 °F	65.0 °C	
Melting Temperature	259 °F	126 °C	ISO 11357-3

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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