

ICORENE® 1613 BK85

Linear Medium Density Polyethylene
Rotomolding

Product Description

ICORENE® 1613 BK85 is a hexene linear medium density polyethylene specifically developed for use in rotational moulding.

This grade is designed for applications requiring good processability, stiffness and toughness. This product is particularly suitable for the production of diesel fuel tanks.

ICORENE® 1613 BK85 is TUV ECE R34 approved, protocolnr: 175XS0121-00.

ICORENE® 1613 BK85 is WRAS approved:1810500.

General

Material Status	• Commercial: Active		
Availability	• Asia Pacific	• Europe	• Latin America
Additive	• UV Stabilizer		
Features	• Good Impact Resistance • Good Processability	• Good Stiffness • Good Toughness	• Hexene Comonomer • UV Resistant
Uses	• Fuel Tanks		
Appearance	• Black		
Forms	• Powder		
Processing Method	• Rotational Molding		

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	0.938 g/cm ³	0.938 g/cm ³	ASTM D1505
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	4.5 g/10 min	4.5 g/10 min	ASTM D1238
Environmental Stress-Cracking Resistance (ESCR) 122°F (50°C), 100% Igepal	> 1000 hr	> 1000 hr	ASTM D1693
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Strength (Yield, 73°F (23°C))	2900 psi	20.0 MPa	ISO 527-1
Tensile Elongation (Break)	> 600 %	> 600 %	ASTM D638
Flexural Modulus (73°F (23°C))	109000 psi	750 MPa	ISO 178
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Drop Impact Resistance ¹ (-4°F (-20°C))	> 4.50 in-lb/mil	> 200 J/cm	Internal Method
Hardness	Nominal Value (English)	Nominal Value (SI)	Test Method
Durometer Hardness (Shore D)	62	62	ASTM D2240
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Heat Deflection Temperature 66 psi (0.45 MPa), Unannealed	149 °F	65.0 °C	ISO 75-2/B
Vicat Softening Temperature	243 °F	117 °C	ISO 306/A
Melting Temperature	261 °F	127 °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.

Company Information

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

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