

Technical Data Sheet

**Icorene 1339**

High Density Polyethylene
LyondellBasell Industries
Rotomolding

Product Description

ICORENE® 1339 is a hexene high density polyethylene specifically developed for use in rotational moulding.
This grade has been designed for applications requiring higher stiffness and toughness.
ICORENE® 1339 is also available as a Black powder.

General

Material Status	• Commercial: Active		
Availability	• Europe		
Additive	• UV Stabilizer		
Features	• Good Impact Resistance • Good Stiffness	• Good Toughness • Hexene Comonomer	• High Rigidity • UV Resistant
Uses	• Tanks		
Appearance	• Black	• Colors Available	• Natural Color
Forms	• Powder		
Processing Method	• Rotational Molding		

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	0.943 g/cm ³	0.943 g/cm ³	ASTM D1505
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	3.0 g/10 min	3.0 g/10 min	ASTM D1238
Environmental Stress-Cracking Resistance (ESCR)			ASTM D1693B
122°F (50°C), 10% Igepal CO-630, Rotational Molded	> 400 hr	> 400 hr	
122°F (50°C), 100% Igepal CO-630, F50	1000 hr	1000 hr	
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Strength ¹ (Yield, 73°F (23°C))	3050 psi	21.0 MPa	ISO 527
Tensile Elongation (Break)	> 1000 %	> 1000 %	ASTM D638
Flexural Modulus (73°F (23°C))	131000 psi	900 MPa	ISO 178
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Drop Impact Resistance ² (-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)	63	63	ASTM D2240
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load			ISO 75-2/B
66 psi (0.45 MPa), Unannealed	167 °F	75.0 °C	
Vicat Softening Temperature	246 °F	119 °C	ISO 306/A
Melting Temperature	262 °F	128 °C	ISO 11357-3

Notes

¹ Type I

² 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

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Company Information

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

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