

Technical Data Sheet

**Icorene 1050**

High Density Polyethylene
LyondellBasell Industries
Rotomolding

Product Description

ICORENE® 1050 is a high 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 and stiffness.

General

Material Status	• Commercial: Active	
Availability	• Europe	
Additive	• UV Stabilizer	
Features	• Balanced Stiffness/Toughness • Good Processability	• High Impact Resistance • UV Resistant
Uses	• Tanks	• Water Sports Equipment
Appearance	• Natural Color	• Unspecified Color
Forms	• Powder	
Processing Method	• Rotational Molding	

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	0.947 g/cm ³	0.947 g/cm ³	ASTM D1505
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	3.8 g/10 min	3.8 g/10 min	ASTM D1238
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Strength (Yield)	3630 psi	25.0 MPa	ASTM D638
Tensile Elongation (Break)	610 %	610 %	ASTM D638
Flexural Modulus	140000 psi	965 MPa	ASTM D790
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Drop Impact Resistance ¹ (-4°F (-20°C))	3.82 in·lb/mil	170 J/cm	Internal Method
Hardness	Nominal Value (English)	Nominal Value (SI)	Test Method
Durometer Hardness (Shore D)	65	65	ASTM D2240
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load 66 psi (0.45 MPa), Unannealed	162 °F	72.0 °C	ISO 75-2/B
Vicat Softening Temperature	252 °F	122 °C	ISO 306/A
Melting Temperature	266 °F	130 °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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