

Technical Data Sheet



Icorene 1380

High Density Polyethylene
LyondellBasell Industries
Rotomolding

Product Description

Icorene® 1380 is a hexene high density polyethylene specifically developed for use in rotational moulding.

This grade has been designed for applications requiring good stiffness and toughness and can be used in many different rotomoulding, including food contact, applications.

Icorene® 1380 Black 9001 is TUV ECE R34 approved, protocolnr: 185XS0206-00.

General

Material Status	• Commercial: Active		
Availability	• Europe		
Additive	• UV Stabilizer		
Features	• Food Contact Acceptable • Good Impact Resistance • Good Stiffness	• Good Toughness • Hexene Comonomer • High ESCR (Stress Crack Resist.)	• UV Resistant
Uses	• Fuel Tanks • Industrial Tanks	• Septic Tanks • Tanks	
Appearance	• Natural Color	• Unspecified Color	
Forms	• Granules	• Powder	
Processing Method	• Rotational Molding		

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	0.939 g/cm ³	0.939 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) 122°F (50°C), 100% Igepal	> 1000 hr	> 1000 hr	ASTM D1693
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Strength ¹ (Yield, 73°F (23°C))	2900 psi	20.0 MPa	ISO 527-1
Tensile Elongation ¹ (Break, 73°F (23°C))	> 1000 %	> 1000 %	ISO 527-1
Flexural Modulus (73°F (23°C))	116000 psi	800 MPa	ASTM D790
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
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Melting Temperature	261 °F	127 °C	ISO 11357-3

Notes

¹ 2.0 in/min (50 mm/min)

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

Company Information

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

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