

Technical Data Sheet

Icorene 5045 SL UV+ BLK 9001

High Density Polyethylene

Product Description

Icorene 5045 SL is a superlinear high density polyethylene specifically developed for use in rotational moulding. It is designed for high rigidity parts and present a good gloss finish with moulds with glossy, chrome, or nickel finishes. This grade is particularly suitable for the production of multilayer boat. It has very high stiffness, good toughness and scratch resistance combined with good processability.

Processing Method	Rotomolding
Attribute	Good Processability; High Scratch Resistance; Ultra High Stiffness; Ultra High Toughness; UV Resistant
Forms	Powder
Appearance	Natural Color; Unspecified Color
Additive	UV Stabilizer
Application	Water Sports Equipment

Typical Properties	Nominal Value	Units	Test Method
Physical			
Melt Flow Rate, (190 °C/2.16 kg)	5.9	g/10 min	ASTM D1238
Density	0.95	g/cm ³	ASTM D1505
Mechanical			
Tensile Elongation at Yield	19	%	ISO 527-1
Tensile Strength at Yield	26.0	MPa	ISO 527-1
Tensile Strength at Break	8.00	MPa	ISO 527-1
Flexural Modulus	1130	MPa	ASTM D790
Tensile Elongation at Break	130	%	ISO 527-1
Impact			
Drop Impact Resistance			
(-20 °C, Internal Method)	200	J/cm	ASTM D4226
(23 °C, Internal Method)	220	J/cm	ASTM D4226
Hardness			
Durometer Hardness, (Shore D)	63		ASTM D2240

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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