Technical Data Sheet

Icorene 5045 SL

High Density Polyethylene
LyondellBasell Industries
Rotomolding

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.

General			
Additive	• UV Stabilizer		
Features	• Good Processability • High Scratch Resistance	• Ultra High Stiffness • Ultra High Toughness	• UV Resistant
Uses	• Water Sports Equipment		
Appearance	• Natural Color	• Unspecified Color	
Forms	• Powder		
Processing Method	• Rotational Molding		

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	0.950 g/cm³	0.950 g/cm³	ASTM D1505
Melt Mass-Flow Rate (MFR) (190°c/2.16 Kg)	5.9 g/10 min	5.9 g/10 min	ASTM D1238
Mechanical	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Tensile Strength [1]			ISO 527-1
Yield	3770 psi	26.0 MPa	
Break	1160 psi	8.00 MPa	
Tensile Elongation [1]			ISO 527-1
Yield	19 %	19 %	
Break	130 %	130 %	
Flexural Modulus	164000 psi	1130 MPa	ASTM D790
Impact	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Drop Impact Resistance [2]			Internal Method
-4°f (-20°c)	4.50 in·lb/mil	200 J/cm	
73°f (23°c)	4.95 in·lb/mil	220 J/cm	
Hardness	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Durometer Hardness (Shore D)	63	63	ASTM D2240

Notes

[1] ISO 527-1B

[2] Based on ISO 6603

Notes

These are typical property values not to be construed as specification limits.