

Technical Data Sheet

Icorene 3550

Linear Low Density Polyethylene
LyondellBasell Industries
Rotomolding

Product Description

ICORENE® 3550 is a linear low density polyethylene for rotational molding applications. The grade is UV stabilized and suitable for applications requiring good stiffness and processability.

General

Additive	• UV Stabilizer		
Uses	• Agricultural Tanks • General Purpose	• Outdoor Applications • Pallets	• Septic Tanks • Toys
Appearance	• Natural Color		
Forms	• Powder		
Processing Method	• Rotational Molding		

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density (Natural)	0.932 to 0.937 g/cm ³	0.932 to 0.937 g/cm ³	ASTM D1505
Melt Mass-Flow Rate (MFR) (190°C/2.16 Kg)	4.5 to 5.5 g/10 min	4.5 to 5.5 g/10 min	ASTM D1238
Environmental Stress-Cracking Resistance (ESCR)			
Condition A, 10% Igepal, F50	100 hr	100 hr	ASTM D1693
100% Igepal, F50	> 1000 hr	> 1000 hr	ASTM D1693A

Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Strength ¹ (Yield, Rotational Molded)	2600 psi	17.9 MPa	ASTM D638
Tensile Elongation ¹			ASTM D638
Break, Rotational Molded	500 %	500 %	
Flexural Modulus - 1% Secant (Rotational Molded)	102000 psi	702 MPa	ASTM D790

Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Impact Strength			ARM
-40°F (-40°C), 0.125 In (3.18 Mm), Rotational Molded	55 ft·lb	75 J	
-40°F (-40°C), 0.250 In (6.35 Mm), Rotational Molded	> 190 ft·lb	> 258 J	

Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load			ASTM D648
66 Psi (0.45 Mpa), Unannealed, Rotational Molded	136 °F	58.0 °C	
264 Psi (1.8 Mpa), Unannealed	102 °F	38.9 °C	

Notes

¹ 2.0 in/min (51 mm/min)

Notes

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