Technical Data Sheet

Polyaxis LLP 3550

Linear Low Density Polyethylene
LyondellBasell Industries
Rotomolding

Product Description
PolyAxis LLP 3550 is a linear low density polyethylene intended for the rotational molding industry. Offers excellent ESCR and toughness.

General			
Features	• Good ESCR (Stress Crack Resist.) • Good Toughness	• Hexene Comonomer • UV Resistant	
Uses	• Agricultural Tanks • Outdoor Applications	• Pallets • Septic Tanks	• Toys
Appearance	• Colors Available		
Forms	• Powder		
Processing Method	• Rotational Molding		

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density / Specific Gravity	0.937	0.935 g/cm³	ASTM D1505
Melt Mass-Flow Rate (MFR) (190°c/2.16 Kg)	5.0 g/10 min	5.0 g/10 min	ASTM D1238
Environmental Stress-Cracking Resistance (ESCR)			ASTM D1693
10% Igepal, Compression Molded, F50	60.0 hr	60.0 hr	
100% Igepal, Compression Molded, F50	> 980 hr	> 980 hr	
Mechanical	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Tensile Strength [1] (Yield, Rotational Molded)	2400 psi	16.5 MPa	ASTM D638
Tensile Elongation [2] (Yield)	20 %	20 %	ASTM D638
Flexural Modulus - 1% Secant (Rotational Molded)	90000 psi	621 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	60 ft·lb	81 J	
-40°f (-40°c), 0.250 In (6.35 Mm), Rotational Molded	160 ft·lb	217 J	
Thermal	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Deflection Temperature Under Load			ASTM D648
66 Psi (0.45 Mpa), Unannealed	122 °F	50.0 °C	
264 Psi (1.8 Mpa), Unannealed	97.0 °F	36.1 °C	
Peak Melting Temperature	259 °F	126 °C	ASTM D3418

Notes

[1] 2.0 in/min (50 mm/min)

[2] 2.0 in/min (51 mm/min)

Notes

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