

# Polyaxis LL 3940-35G BLACK

## LyondellBasell Industries - Linear Low Density Polyethylene

### General Information

#### Product Description

Polyaxis LL 8461 is a linear low density polyethylene intended for the rotational molding industry. Offers excellent ESCR and toughness.

#### General

Features	<ul style="list-style-type: none"> <li>• Good ESCR (Stress Crack Resist.)</li> <li>• Good Toughness</li> </ul>	<ul style="list-style-type: none"> <li>• Hexene Copolymer</li> <li>• UV Resistant</li> </ul>
Uses	<ul style="list-style-type: none"> <li>• Agricultural Tanks</li> <li>• Outdoor Applications</li> </ul>	<ul style="list-style-type: none"> <li>• Pallets</li> <li>• Septic Tanks</li> </ul>
Appearance	<ul style="list-style-type: none"> <li>• Colors Available</li> </ul>	
Forms	<ul style="list-style-type: none"> <li>• Powder</li> </ul>	
Processing Method	<ul style="list-style-type: none"> <li>• Rotational Molding</li> </ul>	

### Properties <sup>1</sup>

Physical	Nominal Value	Unit	Test Method
Density	0.938	g/cm <sup>3</sup>	ASTM D1505
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	3.3	g/10 min	ASTM D1238
Environmental Stress-Cracking Resistance (ESCR)			ASTM D1693
10% Igepal, Compression Molded, F50	60.0	hr	
100% Igepal, Compression Molded, F50	> 1000	hr	
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength <sup>2</sup> (Yield, Rotational Molded)	2890	psi	ASTM D638
Tensile Elongation (Break, Rotational Molded)	240	%	ASTM D638
Flexural Modulus - 1% Secant (Rotational Molded)	121000	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Impact Strength			ARM
-40°F, 0.125 in, Rotational Molded	55	ft-lb	
-40°F, 0.250 in, Rotational Molded	> 190	ft-lb	
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	138	°F	ASTM D648
Deflection Temperature Under Load 264 psi, Unannealed	102	°F	ASTM D648
Peak Melting Temperature	259	°F	ASTM D3418

#### Notes

<sup>1</sup> Typical properties: these are not to be construed as specifications.

<sup>2</sup> 2.0 in/min