

Technical Data Sheet

**Polyaxis LL 8461-2A743G GREY EL**



Linear Low Density Polyethylene

**Product Description**

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

<b>Processing Method</b>	Rotomolding
<b>Attribute</b>	Good ESCR (Environmental Stress Cracking Resistance); Good Toughness; Hexene Comonomer; UV Resistant
<b>Forms</b>	Powder
<b>Appearance</b>	Colors Available
<b>Application</b>	Agricultural Tanks; Outdoor Applications; Pallets; Septic Tanks

Typical Properties	Nominal Value	Units	Test Method
<b>Physical</b>			
Melt Flow Rate, (190 °C/2.16 kg)	3.3	g/10 min	ASTM D1238
Density - Specific Gravity	0.938	g/cm <sup>3</sup>	ASTM D1505
<b>Mechanical</b>			
Tensile Strength at Yield, (50 mm/min, Rotational Molded)	19.9	MPa	ASTM D638
Environmental Stress Crack Resistance			
(Compression Molded, F50, 100% Igepal)	>1000	hr	ASTM D1693
(Compression Molded, F50, 10% Igepal)	60.0	hr	ASTM D1693
Flexural Modulus, (Rotational Molded, 1% Secant)	834	MPa	ASTM D790
Tensile Elongation at Break, (Rotational Molded)	240	%	ASTM D638
<b>Impact</b>			
Impact Strength			
(-40 °C, 3.18 mm, Rotational Molded)	75	J	ARM
(-40 °C, 6.35 mm, Rotational Molded)	>258	J	ARM
<b>Thermal</b>			
Deflection Temperature Under Load Unannealed (264 psi)	38.9	°C	ASTM D648
Deflection Temperature Under Load Unannealed (66 psi)	58.9	°C	ASTM D648
Peak Melting Temperature	126	°C	ASTM D3418