

Technical Data Sheet

Polyaxis EXPLP 8000-31G BLACK



Polyethylene, High Density, Metallocene

Product Description

Polyaxis LP-8000 is a high density polyethylene intended for the rotational molding industry. This stiff yet tough compound has been used in watercraft with good success.

Processing Method	Rotomolding
Forms	Pellets; Powder
Appearance	Colors Available
Additive	Long Term UV-10 Stabilizer

Typical Properties	Nominal Value	Units	Test Method
Physical			
Melt Flow Rate, (190 °C/2.16 kg)	3.6	g/10 min	ASTM D1238
Density - Specific Gravity	0.945	g/cm ³	ASTM D792
Mechanical			
Tensile Strength at Yield, (51 mm/min, Rotational Molded)	22.1	MPa	ASTM D638
Environmental Stress Crack Resistance, (Compression Molded, F50, 10% Igepal)	6.00	hr	ASTM D1693
Flexural Modulus, (Rotational Molded, 1% Secant)	1000	MPa	ASTM D790
Tensile Elongation at Break, (51 mm/min, Rotational Molded)	500	%	ASTM D638
Impact			
Impact Strength			
(-40 °C, 3.18 mm, Rotational Molded)	88	J	ARM
(-40 °C, 6.35 mm, Rotational Molded)	>258	J	ARM
Thermal			
Deflection Temperature Under Load Unannealed (264 psi), (3.18 mm, Rotational Molded)	39.3	°C	ASTM D648
Deflection Temperature Under Load Unannealed (66 psi), (3.18 mm, Rotational Molded)	71.1	°C	ASTM D648