Technical Data Sheet

Polyaxis LP 8100 ADDITIVE MB

Polyethylene, High Density, Metallocene

Product Description

Polyaxis LP-8100 is a high density polyethylene intended for the rotational molding industry. This stiff yet tough compound was designed for watercraft products.

Processing Method	Rotomolding
Forms	Pellets; Powder
Appearance	Colors Available
Additive	UV Stabilizer

Typical Properties	Nominal Value	Units	Test Method
Physical			
Melt Flow Rate, (190 °C/2.16 kg)	5.8	g/10 min	ASTM D1238
Density - Specific Gravity	0.947	g/cm³	ASTM D792
Mechanical			
Tensile Strength at Yield, (51 mm/min, Rotational Molded)	22.4	MPa	ASTM D638
Environmental Stress Crack Resistance, (Compression Molded, F50, 10% Igepal)	6.00	hr	ASTM D1693
Flexural Modulus, (Rotational Molded, 1% Secant)	993	MPa	ASTM D790
Tensile Elongation at Break, (51 mm/min, Rotational Molded)	200	%	ASTM D638
Impact			
Impact Strength			
(-40 °C, 3.18 mm, Rotational Molded)	81	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)	40.6	°C	ASTM D648
Deflection Temperature Under Load Unannealed (66 psi), (3.18 mm, Rotational Molded)	70.0	°C	ASTM D648