Technical Data Sheet

Polyaxis HD 4220-35G BLACK

High Density Polyethylene

Product Description

Polyaxis HD 4220 is a high density polyethylene intended for the rotational molding industry. Offers outstanding stiffness and processability.

Processing Method	Rotomolding
Attribute	Good Moldability; Good Stiffness; Hexene Comonomer; UV Resistant
Forms	Powder
Appearance	Colors Available
Application	General Purpose; Outdoor Applications; Tanks

Typical Properties	Nominal Value	Units	Test Method
Physical			
Melt Flow Rate, (190 °C/2.16 kg)	2.0	g/10 min	ASTM D1238
Density - Specific Gravity	0.940	g/cm³	ASTM D1505
Mechanical			
Tensile Strength at Yield, (51 mm/min, Rotational Molded)	19.3	MPa	ASTM D638
Environmental Stress Crack Resistance			
(Compression Molded, F50, 100% Igepal)	560	hr	ASTM D1693
(Compression Molded, F50, 10% Igepal)	40.0	hr	ASTM D1693
Flexural Modulus, (Rotational Molded, 1% Secant)	896	MPa	ASTM D790
Tensile Elongation at Break, (Rotational Molded)	10	%	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)	37.8	°C	ASTM D648
Deflection Temperature Under Load Unannealed (66 psi)	57.2	°C	ASTM D648
Peak Melting Temperature	129	°C	ASTM D3418

Notes

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

Processing Techniques

Specific recommendations for resin type and processing conditions can only be made when the end use, required properties and fabrication equipment are known.

Company Information

For further information regarding the LyondellBasell company, please visit http://www.lyb.com/.

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