



Polyaxis HD 4220-35G BLACK

LyondellBasell Industries - High Density Polyethylene

General Information

Product Description

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

General

Features	<ul style="list-style-type: none"> • Good Moldability • Good Stiffness 	<ul style="list-style-type: none"> • Hexene Copolymer • UV Resistant
Uses	<ul style="list-style-type: none"> • General Purpose 	<ul style="list-style-type: none"> • Outdoor Applications • Tanks
Appearance	<ul style="list-style-type: none"> • Colors Available 	
Forms	<ul style="list-style-type: none"> • Powder 	
Processing Method	<ul style="list-style-type: none"> • Rotational Molding 	

Properties¹

Physical	Nominal Value	Unit	Test Method
Density	0.940	g/cm ³	ASTM D1505
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	2.0	g/10 min	ASTM D1238
Environmental Stress-Cracking Resistance (ESCR)			ASTM D1693
10% Igepal, Compression Molded, F50	40.0	hr	
100% Igepal, Compression Molded, F50	560	hr	
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength ² (Yield, Rotational Molded)	2800	psi	ASTM D638
Tensile Elongation (Break, Rotational Molded)	10	%	ASTM D638
Flexural Modulus - 1% Secant (Rotational Molded)	130000	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Impact Strength			ARM
-40°F, 0.125 in, Rotational Molded	65	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)	135	°F	ASTM D648
Deflection Temperature Under Load 264 psi, Unannealed	100	°F	ASTM D648
Peak Melting Temperature	264	°F	ASTM D3418

Notes

¹ Typical properties: these are not to be construed as specifications.

² 2.0 in/min