Qplast™ QPHJ 4554

High Density Copolymer Polyethylene

Qplast™ QPHJ 4554 is a narrow molecular weight copolymer designed to deliver an exceptional balance of ESCR, toughness, and stiffness. This resin is best used in heavy-duty applications requiring reliable performance in environments that include sub-zero temperatures.

Supplier	Qplast
Additive	Antioxidant: Yes
Applications	• Caps & Closures • Pails • Packaging Drum Lids • Recreational Vehicle Components

Resin Properties

	Typical Value (English)		Typical Value (SI)		Test Based On
Density	0.952	g/cm³	0.952	g/cm³	ASTM D1505
Melt Index (190°C/2.16 kg)	4.5	g/10 min	4.5	g/10 min	ASTM D1238

Thermal

Deflection Temperature Under Load (DTUL) at 66psi — Unannealed	155	°F	68	°C	ASTM D648
Deflection Temperature Under Load (DTUL) at 264psi — Unannealed	112	°F	44	°C	ASTM D648B
Peak Melting Temperature	271	°C	133	°F	ASTM D3418

Molded Properties

Tensile Strength at Yield	3700	psi	26	MPa	ASTM D638
Elongation at Break	1200	%	1200	%	ExxonMobil Method
Flexural Modulus					ASTM D790B
1% Secant	189000	psi	1300	MPa	
2% Secant	170000	psi	1100	MPa	
Environmental Stress-Crack Resistance					ASTM D1693B
10% Igepal, F50	6	hr	6	hr	

Impact

Impact Strength			ASTM D256
Notched Izod Impact (-40°F (-40°C))	1.1 ft·lb/in	59 J/m	

Disclaimer

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