Qplast™ QPHJ 865

High Density Polyethylene

QPHJ 865 is a high density homopolymer with a narrow molecular weight distribution. It offers outstanding stiffness, low warpage, good toughness, and good moldability.

Supplier	Qplast
Additive	Antiblock: No; Slip: No; Processing Aid: No
Applications	• IV Kit Components • Caps & Closures • Pharmaceutical Packaging • Respiratory Care

Resin Properties

	Typical Value (English)		Typical Value (SI)		Test Method
Density	0.965	g/cm³	0.965	g/cm³	ASTM D792
Melt Index (190°C/2.16kg)	8.3	g/10 min	8.3	g/10 min	ASTM D1238
Melting Temperature (DCS)	271	°F	133	°F	Proprietary Method

Molded Properties

Tensile Strength at Yield	4500	psi	31	MPa	ASTM D638
Tensile Strength at Break	2500	psi	17	MPa	ASTM D638
Tensile Elongation at Yield	6	%	6	%	ASTM D638
Tensile Elongation at Break	350	%	350	%	ASTM D638
Flexural Modulus — 2% Secant	205000	psi	1410	MPa	ASTM D790B
Environmental Stress-Cracking Resistance (ESCR) 122°F (50°C), 100% Igepal, F50	2.00	hr	2.00	hr	ASTM D1693
Film Thickness — Tested	1		25	pm	Proprietary Method
Film Puncture Resistance (1.0 mil (25 pm))	7.00	ft-lb/in³	0.579	J/cm³	Proprietary Method
Secant Modulus MD — 2% Secant	116000	psi	798	MPa	ASTM D882
Secant Modulus TD — 2% Secant	136000	psi	935	MPa	ASTM D882
Tensile Strength at Yield MD	2900	psi	20	MPa	ASTM D882
Tensile Strength at Yield TD	3200	psi	22	MPa	ASTM D882
Tensile Elongation at Break MD	670	%	670	%	ASTM D882
Tensile Elongation at Break TD	490	%	490	%	ASTM D882

Dart Drop Impact	24 g	24 g	ASTM D1709A
Elmendorf Tear Strength MD	36 g	36 g	ASTM D1922
Elmendorf Tear Strength TD	160 g	160 g	ASTM D1922
Tensile Impact Strength	80 ft·lb/in²	168 kJ/m²	ASTM D1822

Thermal

DTUL at 66 psi Unannealed	183 °F	84 °C	ASTM D648

Optical

Gloss	75	75	ASTM D2457
Haze	8 %	8 %	ASTM D1003

Disclaimer

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