

VINPOL™ PC175R2

Injection Molding Grade Polycarbonate

Melt Flow: 17.5

Water Clear or Blue Tint

VINPOL PC175R2 is a UL rated HB, non-halogenated medium flow injection molding grade polycarbonate designed for small and intricate parts. This product is UV stabilized and contains an internal mold release additive. Water clear and blue tint variants are available.

Resin Property	Typical Value	Units	Test Method
Melt Flow, 1.2kgf @ 300°C	17.5	g/10 min	ASTM D-1238
Specific Gravity	1.2		ASTM D-792
Mold Shrinkage, flow, 3.2mm	0.5-0.7	%	Supplier Method
Water Absorption, 23°C/sat	0.35	%	ISO 62
Moisture Absorption, 23°C/50% RH	0.15	%	ISO 62
Melt Volume Rate, MVR @ 300°C/1.2kg	21	cm ³ /10 min	ISO 1133
Light Transmission	88	%	ASTM D-1003
Haze	1	%	ASTM D-1003
Refractive Index	1.586	-	ASTM D-542
Tensile Stress, yld, Type I, 50 mm/min	62	MPa	ASTM D-638
Tensile Stress, brk, Type I, 50 mm/min	65	MPa	ASTM D-638
Tensile Strain, yld, Type I, 50 mm/min	7	%	ASTM D-638
Tensile Strain, brk, Type I, 50 mm/min	110	%	ASTM D-638
Tensile Modulus, 5 mm/min	2,380	MPa	ASTM D-638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	93	MPa	ASTM D-790
Flexural Modulus, 1.3 mm/min, 50 mm span	2,340	MPa	ASTM D-790
Izod Impact, unnotched, 23°C	3,204	J/m	ASTM D-4812
Izod Impact, notched, 23°C	694	J/m	ASTM D-256
Vicat Softening Temp, Rate B/50	154	°C	ASTM D-1525
HDT, 1.82 MPa, 3.2 mm, unannealed	132	°C	ASTM D-648
CTE, -40°C to 95°C, flow	6.84E-05	1/°C	ASTM E-831
Volume Resistivity	>1E+17	Ohm-cm	ASTM D-257
Dielectric Strength, in air, 3.2mm	14.9	kV/mm	ASTM D-149
Relative Permittivity, 50/60 Hz	3.17	-	ASTM D-150
Relative Permittivity, 1 MHz	0.01	-	ASTM D-150
Hot Wire Ignition (PLC)	4	PLC Code	UL 746A
UL Yellow Card, 94HB Flame Class Rating	0.76	mm	UL 94
UV-light, water exposure/immersion	F1	-	UL 746C

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