



VINPOL™ PC105R

Injection Molding Grade Polycarbonate

Melt Flow: 10.5

Specific Gravity: 1.2

VINPOL PC105R is a medium flowing polycarbonate resin with mold release. It is FDA food contact compliant. It is available in limited transparent tints and package types.

Resin Property	Typical Value	Units	Test Method
Melt Flow, 1.2kgf @ 300°C	10.5	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	9	cm³/10 min	ISO 1133
Tensile Stress, yld, Type I, 50 mm/min	62	MPa	ASTM D-638
Tensile Stress, brk, Type I, 50 mm/min	68	MPa	ASTM D-638
Tensile Strain, yld, Type I, 50 mm/min	7	%	ASTM D-638
Tensile Strain, brk, Type I, 50 mm/min	130	%	ASTM D-638
Tensile Modulus, 5 mm/min	2,410	MPa	ASTM D-638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	97	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	801	J/m	ASTM D-256
Tensile Impact Strength, Type S	577	kJ/m²	ASTM D-1822
Instrumented Impact Total Energy, 23°C	63	J	ASTM D-3763
Vicat Softening Temp, Rate B/50	154	°C	ASTM D-1525
HDT, 0.45 MPa, 6.4 mm, unannealed	137	°C	ASTM D-648
HDT, 1.82 MPa, 6.4 mm, unannealed	132	°C	ASTM D-648
CTE, -40°C to 40°C, flow	6.84E-05	1/°C	ASTM E-831
CTE, -40°C to 40°C, xflow	6.65E-05	1/°C	ASTM E-831

Vinmar Polymers America cannot anticipate or control the many different conditions under which this information and/or product may be used. It does not guarantee the applicability or the accuracy of this information or the suitability of its products in any given situation. User of the material should make their own tests to determine the suitability of each such product for their particular purposes. The data listed herein falls within the normal range of product properties, but they should not be used to establish specification limits or used alone as the basis of design.

Vinmar Polymers America, LLC / 16825 Northchase Drive, Suite 1400, Houston, TX 77060
Phone: 281-902-0900 Fax: 281-260-8096

Rev. Date 09/26/2018

