

VINPOL™ HD50056High Density Polyethylene

Melt Index: 50.0

Density: 0.956

VINPOL HD50056 is a multi-purpose high-flow resin that exhibits enhanced processing and thermal stability for fast cycling in multi-cavity stack molds. This resin also exhibits good color and organoleptic properties. Typical applications are rigid food containers and aerosol can overcaps. This product meets the requirements of the U.S. Food and Drug Administration as specified in 21 CFR 177.1520.

Resin Property	Typical Value	Units	Test Method
Melt Index, 2.16 Kg at 190°C	50.0	g/10 min	ASTM D-1238
Density	0.956	g/cm ³	ASTM D-1505
Bulk Density	37-39	lb/ft ³	ASTM D-1895
Flexural Modulus, 1% Secant	196,000 (1,350)	psi (MPa)	ASTM D-790
Flexural Modulus, 2% Secant	166,000 (1,150)	psi (MPa)	ASTM D-790
Flexural Young's Modulus	230,000 (1,590)	psi (MPa)	ASTM D-790
Tensile Strength at Yield	3,740 (26)	psi (MPa)	ASTM D-638
Tensile Strength at Break	3,475 (24)	psi (MPa)	ASTM D-638
Tensile Elongation at Break	4.8	%	ASTM D-638
Notched Izod Impact, 73°F	0.5 (27)	ft-lb/in (J/m)	ASTM D-256
Shore Hardness, Shore D, max	64	-	ASTM D-2240
Vicat Softening Temperature	257 (125)	°F (°C)	ASTM D-1525
Melting Temperature	268 (131)	°F (°C)	ASTM D-3418
Crystallization Temperature	241 (116)	°F (°C)	ASTM D-3418

Conditions of Tensile Stress and Elongation values are: 50 mm/min, Type IV specimen.

Conditions of Flexural Modulus values are: 0.5 inches/min or 12.5 mm/min.

These are typical property values not to be construed as specification limits.

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.