

NINPOL[™]**HD11051** High Density Polyethylene

MI: 11

Density: 0.951

VINPOL HD11051 is a medium molecular weight distribution, high density polyethylene copolymer with a balance of impact strength, ESCR and high flow characteristics. Typical applications include injection molded caps and closures, food containers, housewares, toys and pail handles. This product meets the requirements of the U.S. Food and Drug Administration as specified in 21 CFR 177.1520, covering safe use of polyolefin articles intended for direct food contact. Specific limitations or conditions of use may apply.

Resin Property	Typical Value	Units	Test Method
Melt Index, 2.16 Kg at 190°C	11	g/10 min	ASTM D-1238
Density	0.951	g/cm ³	ASTM D-1505
Tensile Stress at Break, 50mm/min, Type IV	3,830 (26.4)	psi (MPa)	ASTM D-638
Elongation at Break, 50mm/min, Type IV	11	%	ASTM D-638
Flexural Modulus, 1% Secant, 12.5mm/min	158,400 (1,090)	psi (MPa)	ASTM D-790
Notched Izod Impact, 73°F (23°C)	0.56 (30)	ft-lbs/in (J/m)	ASTM D-256
Unnotched Impact, -0.4°F (-18°C)	No Break	-	ASTM D-4812
Vicat Softening Point	255 (124)	°F (°C)	ASTM D-1525
Hardness	71	Shore D	ASTM D-2240
Heat Deflection Temp., 66psi	157 (70)	°F (°C)	ASTM D-648
Low Temperature Brittleness, F ₅₀	-105 (-76)	°F (°C)	ASTM D-746

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.