



VinPol™ HD085H49

High Density Polyethylene

HLMI: 8.5

Density: 0.949

VINPOL HD085H49 is a high molecular weight, high density polyethylene resin designed for non-pressure pipe applications as well as thin gauge, high drawdown, film extrusion applications. This product has balanced physical properties and good stiffness for applications such as corrugated pipe, non-pressure pipe, t-shirt bags, trash can liners, and heavy duty, multi-wall and merchandise bags. It meets all requirements for U.S. FDA 21 CFR 177.1520, covering safe use of polyolefin articles intended for direct food contact.

Resin Property	Typical Value	Units	Test Method
Melt Index, 2.16 Kg at 190°C 21.6 Kg at 190°C (HLMI)	0.04 8.50	g/10 min g/10 min	ASTM D-1238 ASTM D-1238
Density	0.949	g/cm³	ASTM D-1505
NCLS (Notched Constant Ligament Stress)	>1500	hrs	ASTM F-2136
ESCR, Condition B, 10% Igepal	>500	hrs	ASTM D-1693
ESCR, by NCTL @ 15% Yield Stress	400	hrs	ASTM F-2136
Melting Point	131	°C	Supplier Method, DSC
*Dart Drop Impact Strength	590	g/mil	ASTM D-1709
*Elmendorf Tear Strength; MD/TD	17/210	g/mil	ASTM D-1922
*Tensile Strength at Break, MD/TD	9,800/7,000	psi	ASTM D-882
*Tensile Elongation at Break, MD/TD	290/480	%	ASTM D-882
*1% Secant Modulus, MD/TD	74,000/128,000	psi	ASTM D-882

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.

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