







Clear Nylon Series: Novadyn™ CR149HI

Novadyn™ CR149HI is a high viscosity, semi-aromatic copolymer. In addition to superior chemical resistance and barrier properties, this resin offers high stiffness, strength and toughness. Typically, this resin is processed by injection molding and extrusion. Due to partial miscibility with other nylons, Novadyn™ CR149HI resin can be extruded in blends with other polyamide resins.

Applications:

-  Functional Additive
-  Bi-Layer Processing
-  Gas/Oxygen Barrier
-  Injection Molding
-  Crystallization Retarder
-  Films

Typical Properties

Physical Properties	Typical Values	Unit	Test Standard
Density	1.18	<i>g/cm³</i>	ASTM D792
Water Absorption (24hr Immersion)	0.52	%	ASTM D570
Relative Viscosity (96% Sulfuric Acid)	~1.49	--	ISO 307
Melt Flow Rate (250°C w/ 2,160g)	~ 5.0	<i>g/10min</i>	ASTM D1238

Thermal Properties	Typical Values	Unit	Test Standard
Mold Shrinkage (Flow Direction)	0.68	%	ASTM D955
Glass Transition Temperature	129	°C	DSC
Heat Deflection Temperature (0.46MPa)	113	°C	ASTM D648

Mechanical Properties	Dry / Cond.	Unit	Test Standard
Tensile Modulus	2340 / 2126	<i>MPa</i>	ASTM D638
Tensile Stress at Yield	98 / 94	<i>MPa</i>	ASTM D638
Tensile Strain at Yield	6.8 / 7.7	%	ASTM D638
Tensile Stress at Break	90 / 79	<i>MPa</i>	ASTM D638
Tensile Strain at Break	210 / 223	%	ASTM D638
Flexural Modulus	2733 / 2700	<i>MPa</i>	ASTM D790
Flexural Stress	114 / 108	<i>MPa</i>	ASTM D790