

Clear Nylon Series: Novadyn™ CR150HM

Novadyn™ CR150HM 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™ CR150HM 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	g/cm ³	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	g/10min	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	MPa	ASTM D638
Tensile Stress at Yield	98 / 94	MPa	ASTM D638
Tensile Strain at Yield	6.8 / 7.7	%	ASTM D638
Tensile Stress at Break	90 / 79	MPa	ASTM D638
Tensile Strain at Break	>150	%	ASTM D638
Flexural Modulus	2733 / 2700	MPa	ASTM D790
Flexural Stress	114 / 108	MPa	ASTM D790
Izod Notched Impact Strength (23°C)	79 / *	J/m	ASTM D256