









Clear Nylon Series: Novadyn™ AR190SI

Novadyn™ AR190SI is a low viscosity, semi-aromatic copolymer. This resin offers superior chemical resistance and barrier properties, and is specifically suited for applications requiring a gas, liquid or chemical barrier. By itself, Novadyn™ AR190SI is injection molded but it can be extruded in blends with other nylons.

Applications:

-  Functional Additive
-  Bi-Layer Processing
-  Gas/Oxygen Barrier
-  Tubing
-  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
Melt Flow Rate (250°C w/ 1,000 g)	~ 25.0	<i>g/10min</i>	ASTM D1238

Thermal Properties	Typical Values	Unit	Test Standard
Mold Shrinkage (Flow Direction)	0.68	%	ASTM D955
Glass Transition Temperature	125	°C	DSC

Mechanical Properties	Cond.	Unit	Test Standard
Tensile Modulus	1532	<i>MPa</i>	ASTM D638
Tensile Strength at Yield	78	<i>MPa</i>	ASTM D638
Tensile Strain at Yield	5.4	%	ASTM D638
Tensile Stress at Break	79	<i>MPa</i>	ASTM D638
Tensile Strain at Break	5.7	%	ASTM D638