

PA6/66 Series: Shakespeare® CU95SI

Shakespeare® CU95SI is a high viscosity, plasticized PA 6/66 copolymer resin. It is specifically suited for applications requiring excellent abrasion resistance while maintaining a balance of properties including chemical resistance and flexibility. This is an extrusion grade resin that can be processed using conventional techniques.

Applications:

-  Monofilament Extrusion
-  Film Extrusion
-  Cable Jacketing
-  Tubing
-  Impact Modifier
-  Trimmer Line

Typical Properties

Physical Properties	Typical Values	Unit	Test Standard
Density	1.11	<i>g/cm³</i>	ASTM D792
Water Absorption (24hr Immersion)	0.74	%	ASTM D570
Relative Viscosity (90% Formic Acid)	~ 100	--	--

Thermal Properties	Typical Values	Unit	Test Standard
Mold Shrinkage (Flow Direction)	0.74	%	ASTM D955
Melting Temperature	185	°C	DSC

Mechanical Properties	Cond.	Unit	Test Standard
Tensile Modulus	650	<i>MPa</i>	ASTM D638
Tensile Stress at Yield	32	<i>MPa</i>	ASTM D638
Tensile Strain at Yield	5.5	%	ASTM D638
Tensile Stress at Break	54	<i>MPa</i>	ASTM D638
Tensile Strain at Break	230	%	ASTM D638
Flexural Modulus	620	<i>MPa</i>	ASTM D790
Flexural Stress	23	<i>MPa</i>	ASTM D790
Izod Notched Impact Strength (23°C)	> 900	<i>J/m</i>	ASTM D256
Gardner Impact (Energy to Failure) (23°C)	> 36	<i>J</i>	ASTM D5420