






PA610 Series: Valladyn™ HW69SI

Valladyn™ HW69SI is a bio-based, medium viscosity PA610 material. This resin is specifically suited for applications requiring low moisture absorption and great dimensional stability. This product is also used in applications requiring good electrical insulation properties and can be processed using conventional techniques.

Applications:

-  Injection Molding
-  Profile Extrusion
-  Tubing/Wire Coating
-  Films/Filaments
-  FDA Compliant

Typical Properties

Physical Properties	Typical Values	Unit	Test Standard
Density	1.08	g/cm ³	ASTM D792
Water Absorption (24hr Immersion)	0.4	%	ASTM D570
Relative Viscosity (96% Formic Acid)	~ 72	--	--

Thermal Properties	Typical Values	Unit	Test Standard
Mold Shrinkage (Flow Direction)	1.23	%	ASTM D955
Melting Temperature	221	°C	DSC
Heat Deflection Temperature (0.46MPa)	126	°C	ASTM D648

Mechanical Properties	Dry / Cond.	Unit	Test Standard
Tensile Modulus	2500 / 1300	MPa	ASTM D638
Tensile Stress at Yield	66 / 60	MPa	ASTM D638
Tensile Strain at Yield	3.5 / 6.2	%	ASTM D638
Tensile Stress at Break	51 / 67	MPa	ASTM D638
Tensile Strain at Break	250 / 310	%	ASTM D638
Flexural Stress	* / 23	MPa	ASTM D790
Izod Notched Impact Strength (-30°C)	* / 52	J/m	ASTM D256