

PA610 Series: Valladyn™ HW138SI

Valladyn™ HW138SI is a bio-based, high viscosity PA610 material. This resin is specifically suited for applications requiring low moisture absorption and great dimensional stability. Valladyn™ HW138SI is also used in applications requiring good electrical insulation properties and can be processed using conventional techniques.

Applications:

- ▶ Monofilament Extrusion
- ▶ Profile Extrusion
- ▶ Tubing/Wire Coating
- ▶ Films

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)	~ 138	--	--

Thermal Properties	Typical Values	Unit	Test Standard
Mold Shrinkage (Flow Direction)	1.18	%	ASTM D955
Melting Temperature	221	°C	DSC

Mechanical Properties	Dry / Cond.	Unit	Test Standard
Tensile Modulus	1740 / 970	MPa	ASTM D638
Tensile Stress at Yield	54 / 51	MPa	ASTM D638
Tensile Strain at Yield	4.1 / 6.0	%	ASTM D638
Tensile Stress at Break	41 / 42	MPa	ASTM D638
Tensile Strain at Break	100 / 230	%	ASTM D638
Izod Notched Impact Strength (-30°C)	* / 77	J/m	ASTM D256