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PA612 Series: Valladyn® HG31SI

Valladyn™ HG31SI is a high viscosity PA612 material. This resin is specifically suited for applications requiring low moisture regain and greater dimensional stability. Valladyn™ HG31SI is also used in applications requiring good electrical insulation properties and can be processed using conventional techniques.

Ap	pl	ica	tio	ns:

Injection Molding Profile Extrusion Tubing/Cable Jacketing

Electrical Connectors Films/Filament

Typical Properties

Physical Properties	Typical Values	Unit	Test Standard
Density	1.04	g/cm ³	ASTM D792
Water Absorption (24hr Immersion)	0.36	%	ASTM D570
Relative Viscosity (96% Sulfuric Acid)	~ 1.9		ISO 307

Thermal Properties	Typical Values	Unit	Test Standard
Mold Shrinkage (Flow Direction)	1.7	%	ASTM D955
Melting Temperature	217	°C	DSC
Heat Deflection Temperature (0.46MPa)	149	°C	ASTM D648

Mechanical Properties	Dry / Cond	Unit	Test Standard
Tensile Modulus	1686 / 1626	MPa	ASTM D638
Tensile Stress at Yield	65 / 58	MPa	ASTM D638
Tensile Strain at Yield	6.0 / 13.4	%	ASTM D638
Tensile Stress at Break	47 / 46	MPa	ASTM D638
Tensile Strain at Break	253 / 322	%	ASTM D638
Flexural Modulus	1995 / 1675	MPa	ASTM D790
Flexural Stress	75 / 65	MPa	ASTM D790

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