

PA612 Series: Valladyn™ HG195SC

Valladyn™ HG195SC is a low viscosity, compounding grade PA612 material. This resin is specifically suited for applications requiring low moisture regain and greater dimensional stability. Valladyn™ HG195SC is also used in applications requiring good electrical insulation properties and can be processed using conventional techniques.

Applications:

- ▶ Micro/Precision Molding
- ▶ Automotive
- ▶ Glass Molded Compounds
- ▶ Electrical Connectors
- ▶ Improved Loading
- ▶ Engineered Plastic Parts

Typical Properties

| Physical Properties | Typical Values | Unit | Test Standard |
|----------------------------------------|----------------|-------------------|---------------|
| Density | 1.04 | g/cm ³ | ASTM D792 |
| Water Absorption (24hr Immersion) | 0.4 | % | ASTM D570 |
| Relative Viscosity (96% Sulfuric Acid) | ~ 1.53 | -- | ISO 307 |

| Thermal Properties | Typical Values | Unit | Test Standard |
|---------------------------------|----------------|------|---------------|
| Mold Shrinkage (Flow Direction) | 1.13 | % | ASTM D955 |
| Melting Temperature | 217 | °C | DSC |

| Mechanical Properties | Dry / Cond. | Unit | Test Standard |
|-------------------------|-------------|------|---------------|
| Tensile Modulus | 2280 / 1850 | MPa | ASTM D638 |
| Tensile Stress at Yield | 66 / 64 | MPa | ASTM D638 |
| Tensile Strain at Yield | 4.8 / 11.0 | % | ASTM D638 |
| Tensile Stress at Break | 42 / 42 | MPa | ASTM D638 |
| Tensile Strain at Break | 50 / 50 | % | ASTM D638 |