



**Product Data Sheet &  
General Processing Conditions**

**VLF 80209 EM HS  
Nylon 6/6 (PA)  
Long Glass Fiber  
Easy Molding  
Heat Stabilized**

**PROPERTIES & AVERAGE VALUES OF INJECTION MOLDED SPECIMENS**

<b>PERMANENCE</b>	<b>English</b>	<b>SI Metric</b>	<b>ASTM TEST</b>
Primary Additive	50 %	50 %	
Specific Gravity	1.57	1.57	D 792
Molding Shrinkage 1/8 in (3.2 mm) section	0.0010 - 0.0030 in/in	0.10 - 0.30 %	D 955

**MECHANICAL**

Impact Strength, Izod notched 1/8 in (3.2 mm) section	9.0 ft-lbs/in	481 J/m	D 256
unnotched 1/8 in (3.2 mm) section	28.0 ft-lbs/in	1495 J/m	D 4812
Tensile Strength	37500 psi	259 MPa	D 638
Tensile Elongation	2.0 - 3.0 %	2.0 - 3.0 %	D 638
Tensile Modulus	2.30 x 10 <sup>6</sup> psi	15858 MPa	D 638
Flexural Strength	58000 psi	400 MPa	D 790
Flexural Modulus	2.20 x 10 <sup>6</sup> psi	15169 MPa	D 790

**THERMAL**

Deflection Temperature @ 264 psi (1820 kPa)	480 °F	249 °C	D 648
@ 66 psi (455 kPa)	500 °F	260 °C	D 648
Ignition Resistance* Flammability**	HB @ 1/16 in	HB @ 1.5 mm	D 635

**PROPERTY NOTES**

Data herein is typical and not to be construed as specifications.

Unless otherwise specified, all data listed is for natural or black colored materials. Pigments can affect properties.

\* This rating is not intended to reflect hazards of this or any other material under actual fire conditions.

\*\* Values per RTP Company testing.

**GENERAL PROCESSING FOR INJECTION MOLDING**

	<b>English</b>	<b>SI Metric</b>
Injection Pressure	5000 - 18000 psi	34 - 124 MPa
Melt Temperature	520 - 570 °F	271 - 299 °C
Mold Temperature	150 - 255 °F	66 - 124 °C
Drying	2 - 4 hrs @ 175 °F	2 - 4 hrs @ 79 °C
Moisture Content	0.20 %	0.20 %
Dew Point	0 °F	-18 °C

**PROCESSING NOTES**

Use a reverse barrel profile. To maximize fiber length, the following injection barrel, screw, and tip designs should be followed. L/D ratio 16/1 - 22/1, Compression ratio 2:1, Flight depth 0.200 in (5 mm) minimum, in feed section, Screw diameter 0.65 - 0.80 in (16.5 - 20 mm) minimum, Compression section length 12 - 13 diameters, Check ring valve assembly - free flow type no restrictions, Nozzle orifice 0.250 in (6 mm) diameter. Feed throat from hopper to machine must have sufficient opening to prevent bridging of long pellet composition.