Product Data Sheet &
General Processing Conditions

VLF 80207 EM HS
Nylon 6/6 (PA)
Long Glass Fiber
Easy Molding
Heat Stabilized

PROPERTIES & AVERAGE VALUES OF INJECTION MOLDED SPECIMENS

PERMANENCE	English	SI Metric	ASTM TEST
Primary Additive	40 %	40 %	
Specific Gravity	1.46	1.46	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	6.5 ft-lbs/in	347 J/m	D 256
unnotched 1/8 in (3.2 mm) section	24.5 ft-lbs/in	1308 J/m	D 4812
Tensile Strength	33000 psi	228 MPa	D 638
Tensile Elongation	2.0 - 3.0 %	2.0 - 3.0 %	D 638
Tensile Modulus	2.00 x 10^6 psi	13790 MPa	D 638
Flexural Strength	50000 psi	345 MPa	D 790
Flexural Modulus	1.75 x 10^6 psi	12066 MPa	D 790
THERMAL			
Deflection Temperature			
@ 264 psi (1820 kPa)	490 °F	254 °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

	English	SI Metric
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.