Nylene® 51GR13HS IM12

Polymeric Resources Corporation (PRC) - *Polyamide 66*

General Information

Product Description		
13% Glass Reinforced, Heat Stabilized, Impact Modified, Nylon 6/6 Performance Compound		
General		
Material Status	• Commercial: Active	
Availability	• North America	
Filler / Reinforcement	• Glass Fiber, 13% Filler by Weight	
Additive	• Heat Stabilizer	• Impact Modifier
Features	• Heat Stabilized	• Impact Modified
Appearance	• Natural Color	
Forms	• Pellets	
Processing Method	• Injection Molding	

Properties [1]

Physical	**Nominal Value**	**Unit**	**Test Method**
Density / Specific Gravity	1.18		ASTM D792
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Strength (Yield, 73°F)	14500	psi	ASTM D638
Tensile Elongation (Break)	3.0	%	ASTM D638
Flexural Modulus	650000	psi	ASTM D790
Flexural Strength	22000	psi	ASTM D790
Impact	**Nominal Value**	**Unit**	**Test Method**
Notched Izod Impact (73°F, 0.125 in)	2.4	ft·lb/in	ASTM D256
Thermal	**Nominal Value**	**Unit**	**Test Method**
Deflection Temperature Under Load (66 psi, Unannealed, 0.125 in)	460	°F	ASTM D648
Deflection Temperature Under Load (264 psi, Unannealed, 0.125 in)	421	°F	ASTM D648
Flammability	**Nominal Value**	**Unit**	**Test Method**
Flame Rating (0.12 in)	HB		UL 94

Processing Information

Injection	**Nominal Value**	**Unit**
Drying Temperature	180	°F
Drying Time	2.0 to 4.0	hr
Suggested Max Moisture	2.0E-3	%
Rear Temperature	500 to 540	°F
Middle Temperature	500 to 559	°F
Front Temperature	500 to 559	°F
Nozzle Temperature	500 to 559	°F
Processing (Melt) Temp	520 to 559	°F
Mold Temperature	81 to 160	°F
Back Pressure	50.0 to 100	psi