Clariant Nylon 6/6 PA-111TF20

Polyamide 66

Clariant Corporation

Message:

Clariant Nylon 6/6 PA-111TF20 is a polyamide 66 (nylon 66) material. This product is available in North America and is processed by injection molding.
The main features of Clariant Nylon 6/6 PA-111TF20 are:
Flame Retardant
high strength
Good processability
Hard
Corrosion resistance
Typical application areas include:
engineering/industrial accessories
Wire and cable
military applications
Sporting goods
medical/health care

General Information			
Additive	PTFE lubricant (20%)		
Features	Low friction coefficient Rigidity, high High strength Workability, good Good corrosion resistance Good coloring Good chemical resistance Good wear resistance Good toughness Lubrication Low or no water absorption Flame retardancy		
Uses	Gear Metal substitution Military application Sporting goods Cam Medical/nursing supplies		
Agency Ratings	UL 94		
Forms	Particle		
Processing Method	Injection molding		
Physical	**Nominal Value**	**Unit**	**Test Method**

Specific Gravity	1.26	g/cm³	ASTM D792
Molding Shrinkage - Flow (3.18 mm)	1.5	%	ASTM D955
Water Absorption (24 hr)	1.0	%	ASTM D570
Hardness	**Nominal Value**	**Unit**	**Test Method**
Rockwell Hardness (R-Scale)	114		ASTM D785
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Strength	62.1	MPa	ASTM D638
Tensile Elongation (Yield)	40	%	ASTM D638
Flexural Modulus	2550	MPa	ASTM D790
Flexural Strength	89.6	MPa	ASTM D790
Impact	**Nominal Value**	**Unit**	**Test Method**
Notched Izod Impact (3.18 mm)	37	J/m	ASTM D256
Thermal	**Nominal Value**	**Unit**	**Test Method**
Deflection Temperature Under Load			ASTM D648
0.45 MPa, not annealed	238	°C	ASTM D648
1.8 MPa, not annealed	104	°C	ASTM D648
CLTE - Flow	8.3E-5	cm/cm/°C	ASTM D696
Electrical	**Nominal Value**	**Unit**	**Test Method**
Volume Resistivity	1.0E+14	ohms·cm	ASTM D257
Dielectric Strength	19	kV/mm	ASTM D149
Injection	**Nominal Value**	**Unit**	
Drying Temperature	79.4	°C	
Drying Time	2.0 - 4.0	hr	
Suggested Max Moisture	0.20	%	
Rear Temperature	266 - 293	°C	
Middle Temperature	266 - 293	°C	
Front Temperature	266 - 293	°C	
Processing (Melt) Temp	266 - 288	°C	
Melt Temperature (Aim)	274	°C	
Mold Temperature	65.6 - 93.3	°C	
Injection Rate	Fast		
Back Pressure	0.345 - 0.689	MPa	
Screw Speed	20 - 100	rpm	
Cushion	3.18 - 6.35	mm	

Injection instructions

Injection Pressure: Use minimum pressure to achieve 95% fill during the boost inj. pressure phase.Hold Pressure: 30% to 75% of injection pressure.Mold Temp. Target: 180°FScrew Speed Target: 75 RPM

Recommended distributors for this material

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