

# Clariant Nylon 6/6 PA-111

Polyamide 66  
Clariant Corporation

Message:

Clariant Nylon 6/6 PA-111 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-111 are:

- flame retardant/rated flame
- Good processability
- Good toughness
- chemical resistance
- Wear-resistant

Typical application areas include:

- engineering/industrial accessories
- Wire and cable

General Information			
UL YellowCard	E103015-218189		
Features	Workability, good		
	Good chemical resistance		
	Good wear resistance		
	Good toughness		
Uses	Gear		
	Bearing		
Agency Ratings	UL 94		
Appearance	Available colors		
Forms	Particle		
Processing Method	Injection molding		
Physical	Nominal Value	Unit	Test Method
Specific Gravity	1.14	g/cm <sup>3</sup>	ASTM D792
Molding Shrinkage - Flow (3.18 mm)	1.7	%	ASTM D955
Water Absorption (24 hr)	1.2	%	ASTM D570
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (R-Scale)	118		ASTM D785
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength	82.7	MPa	ASTM D638
Tensile Elongation (Yield)	60	%	ASTM D638
Flexural Modulus	2830	MPa	ASTM D790
Flexural Strength	138	MPa	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (3.18 mm)	53	J/m	ASTM D256
Thermal	Nominal Value	Unit	Test Method

Deflection Temperature Under Load			ASTM D648
0.45 MPa, not annealed	235	°C	ASTM D648
1.8 MPa, not annealed	76.7	°C	ASTM D648
Melting Temperature	255	°C	
CLTE - Flow	7.7E-5	cm/cm/°C	ASTM D696
Electrical	Nominal Value	Unit	Test Method
Volume Resistivity	1.0E+14	ohms·cm	ASTM D257
Dielectric Strength	18	kV/mm	ASTM D149
Arc Resistance (3.05 mm)	90.0	sec	ASTM D495
Flammability	Nominal Value	Unit	Test Method
Flame Rating (0.710 mm)	V-2		UL 94
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. phase.Hold Pressure: 30% to 75% of injection pressure.Mold Temp. Target: 180°FScrew Speed Target: 75 RPM

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection.All rights belong to the original authors. If any infringement occurs, please contact us immediately.

#### Recommended distributors for this material

### Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China



WECHAT