Clariant Nylon 6/6 PA-113

Polyamide 66

Clariant Corporation

Message:

Clariant Nylon 6/6 PA-113 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-113 are:
flame retardant/rated flame
Flame Retardant
high strength
Good processability
Corrosion resistance
Typical application areas include:
engineering/industrial accessories
Wire and cable
military applications
Automotive Industry
Sporting goods

General Information	
Additive	heat stabilizer
Features	High strength Workability, good Good corrosion resistance Good coloring Good chemical resistance Good wear resistance Thermal Stability Good toughness Low or no water absorption Flame retardancy
Uses	Gear Metal substitution Military application Sporting goods Cam Medical/nursing supplies Bearing
Agency Ratings	UL 94
Forms	Particle
Processing Method	Injection molding

Physical	Nominal Value	Unit	Test Method
Specific Gravity	1.14	g/cm³	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
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
Flammability	**Nominal Value**	**Unit**	**Test Method**
Flame Rating	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

Recommended distributors for this material

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