Clariant Nylon 6 PA-211TF20

Polyamide 6

Clariant Corporation

Message:

Clariant Nylon 6 PA-211TF20 is a polyamide 6 (nylon 6) material. This product is available in North America and is processed by injection molding.
The main features of the Clariant Nylon 6 PA-211TF20 are:
flame retardant/rated flame
Flame Retardant
Impact modification
high strength
Good processability
Typical application areas include:
engineering/industrial accessories
Wire and cable
Tools
military applications
Sporting goods

General Information	
Additive	PTFE lubricant (20%)
	Impact modifier
Features	Good dimensional stability
	Impact modification
	Low friction coefficient
	Rigidity, high
	High strength
	Workability, good
	Good corrosion resistance
	Good coloring
	Good chemical resistance
	Good wear resistance
	Good toughness
	Lubrication
	Flame retardancy
Uses	Gear
	Power/other tools
	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)	1.3	%	ASTM D955
Water Absorption (24 hr)	1.2	%	ASTM D570
Hardness	**Nominal Value**	**Unit**	**Test Method**
Rockwell Hardness			ASTM D785
Class m	82		ASTM D785
Class r	118		ASTM D785
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Strength	62.1	MPa	ASTM D638
Tensile Elongation (Yield)	10	%	ASTM D638
Flexural Modulus	2410	MPa	ASTM D790
Flexural Strength	96.5	MPa	ASTM D790
Impact	**Nominal Value**	**Unit**	**Test Method**
Notched Izod Impact (3.18 mm)	43	J/m	ASTM D256
Thermal	**Nominal Value**	**Unit**	**Test Method**
Deflection Temperature Under Load			ASTM D648
0.45 MPa, not annealed	177	°C	ASTM D648
1.8 MPa, not annealed	57.2	°C	ASTM D648
CLTE - Flow	8.5E-5	cm/cm/°C	ASTM D696
Electrical	**Nominal Value**	**Unit**	**Test Method**
Volume Resistivity	1.0E+14	ohms·cm	ASTM D257
Dielectric Strength	20	kV/mm	ASTM D149
Flammability	**Nominal Value**	**Unit**	**Test Method**
Flame Rating	HB		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	249 - 274	°C	
Middle Temperature	249 - 274	°C	
Front Temperature	249 - 274	°C	
Processing (Melt) Temp	254 - 271	°C	
Melt Temperature (Aim)	266	°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

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