

## Azoty Tarnow™ Tarnamid® T-27 GF20 FRV0 Polyamide 6 - Flame Retarded, Reinforced

Category : Polymer , Thermoplastic , Nylon , Nylon 6 , Nylon 6 , Glass Fiber Filled, Flame Retardant

### Material Notes:

Flame retarded grades, flammability class V0, reinforced with 20% glass fibers, without addition of any halogen compounds, red phosphorus and asbestos, doesn't release any toxic gases during burning, low smoke density during exhibits. Tarnamid® has the following main properties: High mechanical strength, rigidity and hardness High impact strength High vibration damping capacity Good fatigue strength Very good sliding properties, abrasion resistance, low coefficient of friction High thermal resistance, admissible temperature of continuous operation from -60°C to +150°C High chemical resistance, particularly to organic solvents, oils, lubricants and fuels Considerable moisture absorption influencing mechanical and electrical properties Self-extinguishing properties (fire retardant properties) Good electro-insulating properties Good optical properties, relatively good transparency of molded pieces with thickness below 3.2 mm made from natural Tarnamid® (not dyed and not compounded) Can be used for the production of goods coming into contact with food (grades fulfilling requirement of European Union Directive No 2002/72/EEC) with latest amendments Information provided by Azoty Tarnow™.

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_Azoty-Tarnow-Tarnamid-T-27-GF20-FRV0-Polyamide-6-Flame-Retarded-Reinforced.php](http://www.lookpolymers.com/polymer_Azoty-Tarnow-Tarnamid-T-27-GF20-FRV0-Polyamide-6-Flame-Retarded-Reinforced.php)

Physical Properties	Metric	English	Comments
Specific Gravity	1.30 g/cc	1.30 g/cc	ISO 1183
Linear Mold Shrinkage, Flow	0.0020 cm/cm	0.0020 in/in	ISO 294-4
Linear Mold Shrinkage, Transverse	0.011 cm/cm	0.011 in/in	ISO 294-4
Melt Flow	30 g/10 min @Load 5.00 kg, Temperature 275 °C	30 g/10 min @Load 11.0 lb, Temperature 527 °F	ISO 1133

Mechanical Properties	Metric	English	Comments
Ball Indentation Hardness	120 MPa	17400 psi	cond.; ISO 2039-1
	@Load 36.5 kg	@Load 80.5 lb	
Tensile Strength	220 MPa	31900 psi	dry; ISO 2039-1
	@Load 36.5 kg	@Load 80.5 lb	
Elongation at Break	85.0 MPa	12300 psi	cond.; ISO 527
	130 MPa	18900 psi	dry; ISO 527
Elongation at Break	4.0 %	4.0 %	dry; ISO 527
	5.5 %	5.5 %	cond.; ISO 527

Tensile Modulus Mechanical Properties	5.50 GPa Metric	798 ksi English	cond.; ISO 527 Comments
	8.30 GPa	1200 ksi	dry; ISO 527
Flexural Strength	100 MPa	14500 psi	cond.; ISO 178
	180 MPa	26100 psi	dry; ISO 178
Charpy Impact Unnotched	6.00 J/cm <sup>2</sup>	28.6 ft-lb/in <sup>2</sup>	dry; ISO 179 1eU
	7.00 J/cm <sup>2</sup>	33.3 ft-lb/in <sup>2</sup>	cond.; ISO 179 1eU
Charpy Impact, Notched	0.700 J/cm <sup>2</sup>	3.33 ft-lb/in <sup>2</sup>	dry; ISO 179 1eA
	1.20 J/cm <sup>2</sup>	5.71 ft-lb/in <sup>2</sup>	cond.; ISO 179 1eA

Thermal Properties	Metric	English	Comments
Melting Point	221 °C	430 °F	
Deflection Temperature at 1.8 MPa (264 psi)	190 °C	374 °F	cond.; ISO 75
	200 °C	392 °F	dry; ISO 75
Vicat Softening Point	200 °C	392 °F	cond.; ISO 306
	@Load 5.10 kg	@Load 11.2 lb	
	205 °C	401 °F	dry; ISO 306
	@Load 5.10 kg	@Load 11.2 lb	
Flammability, UL94	V-0	V-0	
	@Thickness 1.60 mm	@Thickness 0.0630 in	
Glow Wire Test	960 °C	1760 °F	PN-EN-60695-2-12
	@Thickness 2.00 mm	@Thickness 0.0787 in	

Electrical Properties	Metric	English	Comments
Surface Resistance	1.00e+15 ohm	1.00e+15 ohm	IEC 93
Dielectric Strength	20.0 kV/mm	508 kV/in	IEC 243-1
Comparative Tracking Index	525 V	525 V	IEC 112

Processing Properties	Metric	English	Comments
Melt Temperature	230 - 290 °C	446 - 554 °F	
Mold Temperature	60.0 - 120 °C	140 - 248 °F	80 - 90°C is recommended

Processing Properties	75.0 - 100 °C Metric	167 - 212 °F English	Comments
Drying Temperature	@Time 7200 - 14400 sec	@Time 2.00 - 4.00 hour	
Moisture Content	<= 0.10 %	<= 0.10 %	
Injection Pressure	80.0 - 130 MPa	11600 - 18900 psi	80 MPa is recommended

## Contact Songhan Plastic Technology Co.,Ltd.

Website : [www.lookpolymers.com](http://www.lookpolymers.com)

Email : [sales@lookpolymers.com](mailto:sales@lookpolymers.com)

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

Address : United North Road 215,Fengxian District, Shanghai City,China