

## Azoty Tarnow™ Tarnamid® T-27 CFHI Polyamide 6 - Antistatic and Electroconductive

Category : Polymer , Thermoplastic , Nylon , Nylon 6 , Nylon 6, Carbon Fiber Filled

### Material Notes:

Medium viscosity injection molding grade, also used for compounding, for production of monofilament, bristles and fibers. Electroconductive grade based on carbon fiber reinforcement, very high stiffness and strength. 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-CFHI-Polyamide-6-Antistatic-and-Electroconductive.php](http://www.lookpolymers.com/polymer_Azoty-Tarnow-Tarnamid-T-27-CFHI-Polyamide-6-Antistatic-and-Electroconductive.php)

Physical Properties	Metric	English	Comments
Specific Gravity	1.11 g/cc	1.11 g/cc	ISO 1183
Linear Mold Shrinkage, Flow	0.011 cm/cm	0.011 in/in	ISO 294-4
Linear Mold Shrinkage, Transverse	0.014 cm/cm	0.014 in/in	ISO 294-4
Melt Flow	35 g/10 min @Load 5.00 kg, Temperature 275 °C	35 g/10 min @Load 11.0 lb, Temperature 527 °F	ISO 1133

Mechanical Properties	Metric	English	Comments
Ball Indentation Hardness	90.0 MPa	13100 psi	cond.; ISO 2039-1
	@Load 36.5 kg	@Load 80.5 lb	
Tensile Strength	120 MPa	17400 psi	dry; ISO 2039-1
	@Load 36.5 kg	@Load 80.5 lb	
Elongation at Break	70.0 MPa	10200 psi	cond.; ISO 527
	90.0 MPa	13100 psi	
Tensile Modulus	6.0 %	6.0 %	dry; ISO 527
	13 %	13 %	
	4.00 GPa	580 ksi	cond.; ISO 527

Mechanical Properties	5.50 GPa Metric	798 ksi English	dry; ISO 527 Comments
Flexural Strength	<= 75.0 MPa	<= 10900 psi	cond.; ISO 178
	<= 100 MPa	<= 14500 psi	dry; ISO 178
Charpy Impact Unnotched	8.00 J/cm <sup>2</sup>	38.1 ft-lb/in <sup>2</sup>	dry; ISO 179 1eU
	11.0 J/cm <sup>2</sup>	52.3 ft-lb/in <sup>2</sup>	cond.; ISO 179 1eU
Charpy Impact, Notched	1.10 J/cm <sup>2</sup>	5.23 ft-lb/in <sup>2</sup>	dry; ISO 179 1eA
	1.50 J/cm <sup>2</sup>	7.14 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)	170 °C	338 °F	dry; ISO 75
	170 °C	338 °F	cond.; ISO 75
Vicat Softening Point	165 °C	329 °F	cond.; ISO 306
	@Load 5.10 kg	@Load 11.2 lb	
	180 °C	356 °F	dry; ISO 306
	@Load 5.10 kg	@Load 11.2 lb	
Flammability, UL94	HB	HB	
	@Thickness 1.60 mm	@Thickness 0.0630 in	

Electrical Properties	Metric	English	Comments
Surface Resistance	30 ohm	30 ohm	IEC 93

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
Drying Temperature	75.0 - 100 °C	167 - 212 °F	
	@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**