

## Azoty Tarnow™ Tarnamid® T-27 CF40 Polyamide 6 40% Carbon Fiber - 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-CF40-Polyamide-6-40-Carbon-Fiber-Antistatic-and-Electroconductive.php](http://www.lookpolymers.com/polymer_Azoty-Tarnow-Tarnamid-T-27-CF40-Polyamide-6-40-Carbon-Fiber-Antistatic-and-Electroconductive.php)

Physical Properties	Metric	English	Comments
Specific Gravity	1.30 g/cc	1.30 g/cc	ISO 1183
Melt Flow	20 g/10 min @Load 5.00 kg, Temperature 275 °C	20 g/10 min @Load 11.0 lb, Temperature 527 °F	ISO 1133

Mechanical Properties	Metric	English	Comments
Ball Indentation Hardness	270 MPa @Load 36.5 kg	39200 psi @Load 80.5 lb	ISO 2039-1
Tensile Strength	190 MPa	27600 psi	ISO 527
Elongation at Break	3.0 %	3.0 %	ISO 527
Tensile Modulus	21.8 GPa	3160 ksi	ISO 527
Flexural Strength	<= 270 MPa	<= 39200 psi	ISO 178
Charpy Impact Unnotched	4.20 J/cm²	20.0 ft-lb/in²	ISO 179 1eU
Charpy Impact, Notched	0.600 J/cm²	2.86 ft-lb/in²	ISO 179 1eA

Thermal Properties	Metric	English	Comments
Melting Point	221 °C	430 °F	

Thermal Properties <small>Deflection Temperature at 1.8 MPa (180 psi)</small>	Metric <small>205 °C</small>	English <small>401 °F</small>	Comments <small>ISO 35</small>
Vicat Softening Point	215 °C @Load 5.10 kg	419 °F @Load 11.2 lb	ISO 306
Flammability, UL94	HB @Thickness 1.60 mm	HB @Thickness 0.0630 in	

Electrical Properties	Metric	English	Comments
Surface Resistance	0.19 ohm	0.19 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 @Time 7200 - 14400 sec	167 - 212 °F @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