

## Azoty Tarnow™ Tarnamid® T-27 CF30 Polyamide 6 30% 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-CF30-Polyamide-6-30-Carbon-Fiber-Antistatic-and-Electroconductive.php](http://www.lookpolymers.com/polymer_Azoty-Tarnow-Tarnamid-T-27-CF30-Polyamide-6-30-Carbon-Fiber-Antistatic-and-Electroconductive.php)

| Physical Properties | Metric  | English   | Comments |
|---------------------|---|---|----------|
| Specific Gravity    | 1.25 g/cc   | 1.25 g/cc   | ISO 1183 |
| Melt Flow           | 30 g/10 min<br>@Load 5.00 kg,<br>Temperature 275 °C | 30 g/10 min<br>@Load 11.0 lb,<br>Temperature 527 °F | ISO 1133 |

| Mechanical Properties     | Metric                   | English                    | Comments    |
|---------------------------|--------------------------|----------------------------|-------------|
| Ball Indentation Hardness | 255 MPa<br>@Load 36.5 kg | 37000 psi<br>@Load 80.5 lb | ISO 2039-1  |
| Tensile Strength          | 190 MPa                  | 27600 psi                  | ISO 527     |
| Elongation at Break       | 3.6 %                    | 3.6 %                      | ISO 527     |
| Tensile Modulus           | 19.2 GPa                 | 2780 ksi                   | ISO 527     |
| Flexural Strength         | <= 260 MPa               | <= 37700 psi               | ISO 178     |
| Charpy Impact Unnotched   | 5.00 J/cm <sup>2</sup>   | 23.8 ft-lb/in <sup>2</sup> | ISO 179 1eU |
| Charpy Impact, Notched    | 0.660 J/cm <sup>2</sup>  | 3.14 ft-lb/in <sup>2</sup> | ISO 179 1eA |

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

| Thermal Properties<br><small>Deflection Temperature at 1.8 MPa<br/>(104 psi)</small> | Metric<br><small>205 °C</small> | English<br><small>401 °F</small> | Comments<br><small>ISO 35</small> |
|--|---------------------------------|----------------------------------|-----------------------------------|
| Vicat Softening Point  | 215 °C<br>@Load 5.10 kg         | 419 °F<br>@Load 11.2 lb          | ISO 306                           |
| Flammability, UL94   | HB<br>@Thickness 1.60 mm        | HB<br>@Thickness 0.0630 in       |                                   |

| Electrical Properties | Metric   | English  | Comments |
|-----------------------|----------|----------|----------|
| Surface Resistance    | 0.51 ohm | 0.51 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<br>@Time 7200 - 14400<br>sec | 167 - 212 °F<br>@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