

## LNP Thermocomp® FP-EC-1004 Ethylene Tetrafluoroethylene Copolymer, Carbon Fiber Reinforcement (discontinued \*)

Category : Polymer , Thermoplastic , Fluoropolymer , ETFE/ECTFE

### Material Notes:

Features: Electrically ConductiveForms: PelletsProcessing Method: Injection MoldingInformation provided by LNP, a GE Plastics Company.This data sheet is labeled Discontinued; however many LNP grades are still active under new names instituted after the SABIC purchase.

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_LNP-Thermocomp-FP-EC-1004-Ethylene-Tetrafluoroethylene-Copolymer-Carbon-Fiber-Reinforcement-nbspdiscontinued-.php](http://www.lookpolymers.com/polymer_LNP-Thermocomp-FP-EC-1004-Ethylene-Tetrafluoroethylene-Copolymer-Carbon-Fiber-Reinforcement-nbspdiscontinued-.php)

| Physical Properties               | Metric       | English      | Comments            |
|-----------------------------------|--------------|--------------|---------------------|
| Specific Gravity                  | 1.75 g/cc    | 1.75 g/cc    | Method A; ASTM D792 |
| Linear Mold Shrinkage             | 0.0070 cm/cm | 0.0070 in/in | ASTM D955           |
| Linear Mold Shrinkage, Transverse | 0.022 cm/cm  | 0.022 in/in  | ASTM D955           |

| Mechanical Properties        | Metric                          | English                              | Comments                                           |
|------------------------------|---------------------------------|--------------------------------------|----------------------------------------------------|
| Tensile Strength at Break    | 60.0 MPa                        | 8700 psi                             | ASTM D638                                          |
| Elongation at Break          | 2.5 %                           | 2.5 %                                | ASTM D638                                          |
| Tensile Modulus              | 13.3 GPa                        | 1930 ksi                             | ASTM D638                                          |
| Flexural Strength            | 103 MPa                         | 14900 psi                            | ASTM D790                                          |
| Flexural Modulus             | 10.5 GPa                        | 1520 ksi                             | ASTM D790                                          |
| Izod Impact, Notched         | 1.81 J/cm<br>@Thickness 3.18 mm | 3.39 ft-lb/in<br>@Thickness 0.125 in | ASTM D256                                          |
| Izod Impact, Unnotched       | 5.87 J/cm<br>@Thickness 3.18 mm | 11.0 ft-lb/in<br>@Thickness 0.125 in | ASTM D256                                          |
| Izod Impact, Notched (ISO)   | 15.4 kJ/m <sup>2</sup>          | 7.33 ft-lb/in <sup>2</sup>           | ISO 180                                            |
| Izod Impact, Unnotched (ISO) | 36.8 kJ/m <sup>2</sup>          | 17.5 ft-lb/in <sup>2</sup>           | ISO 180                                            |
| Falling Dart Impact          | 14.0 J                          | 10.3 ft-lb                           | ASTM D3763                                         |
| Impact Test                  | 6.00 J                          | 4.43 ft-lb                           | Multi-Axial Instrumented Impact Energy; ISO 6603-2 |

| Thermal Properties | Metric       | English        | Comments |
|--------------------|--------------|----------------|----------|
|                    | 25.0 µm/m-°C | 13.9 µin/in-°F |          |

| CTE, linear<br>Thermal Properties              | Metric<br>@ Temperature 20.0 °C       | English<br>@ Temperature 68.0 °F        | TMA; ASTM E831<br>Comments |
|------------------------------------------------|---------------------------------------|-----------------------------------------|----------------------------|
| CTE, linear, Transverse to Flow                | 54.0 µm/m-°C<br>@ Temperature 20.0 °C | 30.0 µin/in-°F<br>@ Temperature 68.0 °F | TMA; ASTM E831             |
| Deflection Temperature at 0.46 MPa<br>(66 psi) | 253 °C                                | 487 °F                                  | Unannealed; ASTM D648      |
| Deflection Temperature at 1.8 MPa<br>(264 psi) | 209 °C                                | 408 °F                                  | Unannealed; ASTM D648      |

| Processing Properties | Metric            | English         | Comments |
|-----------------------|-------------------|-----------------|----------|
| Melt Temperature      | 316 °C            | 601 °F          |          |
| Mold Temperature      | 93.3 - 121 °C     | 200 - 250 °F    |          |
| Drying Temperature    | 121 - 149 °C      | 250 - 300 °F    |          |
| Dry Time              | 4 hour            | 4 hour          |          |
| Back Pressure         | 0.172 - 0.345 MPa | 24.9 - 50.0 psi |          |

## 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