

## SABIC Innovative Plastics LNP Thermocomp JF003L PES

Category : Polymer , Thermoplastic , Polyethersulfone (PES)

### Material Notes:

LNP\* Thermocomp\* JF003L is a compound based on Polyethersulfone (PES) containing Glass Fiber. Characteristics of this grade are Low Extractable. This data was supplied by SABIC-IP for the Americas region.

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_SABIC-Innovative-Plastics-LNP-Thermocomp-JF003L-PES.php](http://www.lookpolymers.com/polymer_SABIC-Innovative-Plastics-LNP-Thermocomp-JF003L-PES.php)

| Physical Properties                | Metric                | English                   | Comments               |
|------------------------------------|-----------------------|---------------------------|------------------------|
| Specific Gravity                   | 1.49 g/cc             | 1.49 g/cc                 | ASTM D 792             |
| Density                            | 1.48 g/cc             | 0.0535 lb/in <sup>3</sup> | ASTM D 792             |
| Moisture Absorption at Equilibrium | 0.66 %                | 0.66 %                    | 23Â°C / 50% RH; ISO 62 |
|                                    | 0.43 %                | 0.43 %                    | 50% RH; ASTM D 570     |
|                                    | @Time 86400 sec       | @Time 24.0 hour           |                        |
| Linear Mold Shrinkage, Flow        | 0.0050 - 0.0070 cm/cm | 0.0050 - 0.0070 in/in     | ASTM D 955             |
|                                    | @Time 86400 sec       | @Time 24.0 hour           |                        |
| Linear Mold Shrinkage, Transverse  | 0.0060 - 0.0080 cm/cm | 0.0060 - 0.0080 in/in     | ASTM D 955             |
|                                    | @Time 86400 sec       | @Time 24.0 hour           |                        |

| Mechanical Properties     | Metric   | English   | Comments                           |
|---------------------------|----------|-----------|------------------------------------|
| Tensile Strength at Break | 96.0 MPa | 13900 psi | 5 mm/min; ISO 527                  |
|                           | 103 MPa  | 14900 psi | Type I, 5 mm/min; ASTM D 638       |
| Elongation at Break       | 2.6 %    | 2.6 %     | 5 mm/min; ISO 527                  |
|                           | 2.7 %    | 2.7 %     | Type I, 5 mm/min; ASTM D 638       |
| Tensile Modulus           | 5.89 GPa | 854 ksi   | 1 mm/min; ISO 527                  |
|                           | 5.98 GPa | 867 ksi   | 50 mm/min; ASTM D 638              |
| Flexural Strength         | 155 MPa  | 22500 psi | ISO 178                            |
|                           | 157 MPa  | 22800 psi | 1.3 mm/min, 50 mm span; ASTM D 790 |
| Flexural Yield Strength   | 157 MPa  | 22800 psi | 1.3 mm/min, 50 mm span; ASTM D 790 |
| Flexural Modulus          | 5.56 GPa | 806 ksi   | 2 mm/min; ISO 178                  |
|                           | 5.65 GPa | 819 ksi   | 1.3 mm/min, 50 mm span; ASTM D     |

| Mechanical Properties        | Metric                                  | English                                  | 790<br>Comments                                  |
|------------------------------|-----------------------------------------|------------------------------------------|--------------------------------------------------|
| Izod Impact, Notched         | 0.410 J/cm<br>@Temperature 23.0<br>Â°C  | 0.768 ft-lb/in<br>@Temperature 73.4 Â°F  | ASTM D 256                                       |
| Izod Impact, Unnotched       | 5.18 J/cm<br>@Temperature 23.0<br>Â°C   | 9.70 ft-lb/in<br>@Temperature 73.4 Â°F   | ASTM D 4812                                      |
| Izod Impact, Notched (ISO)   | 5.00 kJ/mÂ²<br>@Temperature 23.0<br>Â°C | 2.38 ft-lb/inÂ²<br>@Temperature 73.4 Â°F | 80*10*4; ISO 180/1A                              |
| Izod Impact, Unnotched (ISO) | 30.0 kJ/mÂ²<br>@Temperature 23.0<br>Â°C | 14.3 ft-lb/inÂ²<br>@Temperature 73.4 Â°F | 80*10*4; ISO 180/1U                              |
| Impact Test                  | 4.00 J                                  | 2.95 ft-lb                               | Multiaxial Impact; ISO 6603                      |
|                              | 10.0 J<br>@Temperature 23.0<br>Â°C      | 7.38 ft-lb<br>@Temperature 73.4 Â°F      | Instrumented Impact Total Energy;<br>ASTM D 3763 |

| Thermal Properties                             | Metric                                             | English                                              | Comments                         |
|------------------------------------------------|----------------------------------------------------|------------------------------------------------------|----------------------------------|
| CTE, linear, Parallel to Flow                  | 34.0 Âµm/m-Â°C<br>@Temperature -30.0 -<br>30.0 Â°C | 18.9 Âµin/in-Â°F<br>@Temperature -22.0 -<br>86.0 Â°F | ASTM D 696                       |
| CTE, linear, Transverse to Flow                | 45.0 Âµm/m-Â°C<br>@Temperature -30.0 -<br>30.0 Â°C | 25.0 Âµin/in-Â°F<br>@Temperature -22.0 -<br>86.0 Â°F | ASTM D 696                       |
| Deflection Temperature at 0.46 MPa<br>(66 psi) | 220 Â°C                                            | 428 Â°F                                              | Flatw 80*10*4 sp=64mm; ISO 75/Bf |
|                                                | 221 Â°C<br>@Thickness 3.20 mm                      | 430 Â°F<br>@Thickness 0.126 in                       | unannealed; ASTM D 648           |
| Deflection Temperature at 1.8 MPa<br>(264 psi) | 215 Â°C                                            | 419 Â°F                                              | Flatw 80*10*4 sp=64mm; ISO 75/Af |
|                                                | 216 Â°C<br>@Thickness 3.20 mm                      | 421 Â°F<br>@Thickness 0.126 in                       | unannealed; ASTM D 648           |

**Contact Songhan Plastic Technology Co.,Ltd.**

Website : www.lookpolymers.com

Email : sales@lookpolymers.com

**Tel : +86 021-51131842**

**Mobile : +86 13061808058**

**Skype : lookpolymers**

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