

## Overview of materials for Polyphenylene Ether + Styrene-Butadiene Blend, Glass Filled

Category : Polymer , Thermoplastic , Polyphenylene Ether/PPO , Polyphenylene Ether + Styrene-Butadiene Blend, Glass Filled

### Material Notes:

This property data is a summary of similar materials in the MatWeb database for the category "Polyphenylene Ether + Styrene-Butadiene Blend, Glass Filled". Each property range of values reported is minimum and maximum values of appropriate MatWeb entries. The comments report the average value, and number of data points used to calculate the average. The values are not necessarily typical of any specific grade, especially less common values and those that can be most affected by additives or processing methods.

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_Overview-of-materials-for-Polyphenylene-Ether-Styrene-Butadiene-Blend-Glass-Filled.php](http://www.lookpolymers.com/polymer_Overview-of-materials-for-Polyphenylene-Ether-Styrene-Butadiene-Blend-Glass-Filled.php)

| Physical Properties                | Metric                  | English                            | Comments                                   |
|------------------------------------|-------------------------|------------------------------------|--|
| Density                            | 1.14 - 1.26 g/cc        | 0.0412 - 0.0455 lb/in <sup>3</sup> | Average value: 1.20 g/cc Grade Count:5     |
| Water Absorption                   | 0.300 - 0.400 %         | 0.300 - 0.400 %                    | Average value: 0.340 % Grade Count:5       |
| Moisture Absorption at Equilibrium | 0.100 - 0.150 %         | 0.100 - 0.150 %                    | Average value: 0.120 % Grade Count:5       |
| Linear Mold Shrinkage              | 0.00300 - 0.00450 cm/cm | 0.00300 - 0.00450 in/in            | Average value: 0.00400 cm/cm Grade Count:5 |
| Melt Flow                          | 7.00 - 24.0 g/10 min    | 7.00 - 24.0 g/10 min               | Average value: 14.6 g/10 min Grade Count:5 |

| Mechanical Properties             | Metric   | English  | Comments  |
|-----------------------------------|--|--|---|
| Tensile Strength, Ultimate        | 75.0 - 110 MPa   | 10900 - 16000 psi  | Average value: 88.0 MPa Grade Count:5               |
| Elongation at Break               | 2.50 - 4.00 %  | 2.50 - 4.00 %  | Average value: 3.30 % Grade Count:5                 |
| Modulus of Elasticity             | 4.50 - 9.00 GPa  | 653 - 1310 ksi   | Average value: 6.20 GPa Grade Count:5               |
| Charpy Impact Unnotched           | 3.50 - 4.00 J/cm <sup>2</sup>                                      | 16.7 - 19.0 ft-lb/in <sup>2</sup>                                      | Average value: 3.90 J/cm <sup>2</sup> Grade Count:5 |
|                                   | 3.50 - 4.00 J/cm <sup>2</sup><br>@Temperature -30.0 - -<br>30.0 °C | 16.7 - 19.0 ft-lb/in <sup>2</sup><br>@Temperature -22.0 - -<br>22.0 °F | Average value: 3.90 J/cm <sup>2</sup> Grade Count:5 |
| Charpy Impact, Notched            | 1.10 - 1.40 J/cm <sup>2</sup>                                      | 5.24 - 6.66 ft-lb/in <sup>2</sup>                                      | Average value: 1.24 J/cm <sup>2</sup> Grade Count:5 |
|                                   | 1.10 - 1.40 J/cm <sup>2</sup><br>@Temperature -30.0 - -<br>30.0 °C | 5.24 - 6.66 ft-lb/in <sup>2</sup><br>@Temperature -22.0 - -<br>22.0 °F | Average value: 1.24 J/cm <sup>2</sup> Grade Count:5 |
| Tensile Creep Modulus, 1000 hours | 2800 - 6100 MPa  | 406000 - 885000 psi  | Average value: 4680 MPa Grade Count:3               |

| Mechanical Properties                       | Metric  | English   | Comments  |
|---|---|---|---|
| CTE, linear                                 | 35.0 - 55.0 $\mu\text{m}/\text{m}\cdot^{\circ}\text{C}$ | 19.4 - 30.6 $\mu\text{in}/\text{in}\cdot^{\circ}\text{F}$ | Average value: 43.0 $\mu\text{m}/\text{m}\cdot^{\circ}\text{C}$ Grade Count:5 |
| Deflection Temperature at 0.46 MPa (66 psi) | 136 - 145 $^{\circ}\text{C}$                            | 277 - 293 $^{\circ}\text{F}$                              | Average value: 140 $^{\circ}\text{C}$ Grade Count:5                           |
| Deflection Temperature at 1.8 MPa (264 psi) | 128 - 141 $^{\circ}\text{C}$                            | 262 - 286 $^{\circ}\text{F}$                              | Average value: 135 $^{\circ}\text{C}$ Grade Count:5                           |
| Vicat Softening Point                       | 138 - 145 $^{\circ}\text{C}$                            | 280 - 293 $^{\circ}\text{F}$                              | Average value: 141 $^{\circ}\text{C}$ Grade Count:5                           |
| Flammability, UL94                          | HB - V-1  | HB - V-1  | Grade Count:5   |

| Electrical Properties      | Metric             | English            | Comments                                     |
|----------------------------|--------------------|--------------------|--|
| Electrical Resistivity     | 1.00e+15 ohm-cm    | 1.00e+15 ohm-cm    | Average value: 1.00e+15 ohm-cm Grade Count:5 |
| Surface Resistance         | 1.00e+14 ohm       | 1.00e+14 ohm       | Average value: 1.00e+14 ohm Grade Count:5    |
| Dielectric Constant        | 2.70 - 3.00        | 2.70 - 3.00        | Average value: 2.87 Grade Count:5            |
| Dielectric Strength        | 85.0 - 95.0 kV/mm  | 2160 - 2410 kV/in  | Average value: 90.0 kV/mm Grade Count:5      |
| Dissipation Factor         | 0.000800 - 0.00300 | 0.000800 - 0.00300 | Average value: 0.00172 Grade Count:5         |
| Comparative Tracking Index | 225 - 250 V        | 225 - 250 V        | Average value: 240 V Grade Count:5           |

## 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