

Overview of materials for Polypropylene with Glass Fiber + Bead Filler

Category : Polymer , Thermoplastic , Polypropylene (PP) , Polypropylene with Glass Fiber + Bead Filler

Material Notes:

This property data is a summary of similar materials in the MatWeb database for the category "Polypropylene with Glass Fiber + Bead Filler". 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-Polypropylene-with-Glass-Fiber-Bead-Filler.php

| Physical Properties | Metric | English | Comments |
|-----------------------|-------------------------|------------------------------------|--|
| Density | 1.04 - 1.23 g/cc | 0.0376 - 0.0444 lb/in ³ | Average value: 1.17 g/cc Grade Count:9 |
| Filler Content | 10.0 - 20.0 % | 10.0 - 20.0 % | Average value: 15.0 % Grade Count:4 |
| Water Absorption | 0.0100 - 0.0200 % | 0.0100 - 0.0200 % | Average value: 0.0120 % Grade Count:5 |
| Linear Mold Shrinkage | 0.00200 - 0.00900 cm/cm | 0.00200 - 0.00900 in/in | Average value: 0.00491 cm/cm Grade Count:7 |
| Melt Flow | 2.50 - 10.0 g/10 min | 2.50 - 10.0 g/10 min | Average value: 4.50 g/10 min Grade Count:4 |

| Mechanical Properties | Metric | English | Comments |
|----------------------------|---|--|---------------------------------------|
| Hardness, Rockwell R | 85.0 - 120 | 85.0 - 120 | Average value: 96.7 Grade Count:3 |
| Tensile Strength, Ultimate | 34.5 - 72.0 MPa | 5000 - 10400 psi | Average value: 48.7 MPa Grade Count:7 |
| | 18.0 - 40.0 MPa @Temperature 60.0 - 120 °C | 2610 - 5800 psi @Temperature 140 - 248 °F | Average value: 29.3 MPa Grade Count:1 |
| Elongation at Break | 2.50 - 5.00 % | 2.50 - 5.00 % | Average value: 3.43 % Grade Count:7 |
| Modulus of Elasticity | 3.59 - 5.60 GPa | 520 - 812 ksi | Average value: 4.86 GPa Grade Count:7 |
| Flexural Yield Strength | 48.3 - 80.0 MPa | 7000 - 11600 psi | Average value: 65.6 MPa Grade Count:7 |
| Flexural Modulus | 2.76 - 4.80 GPa | 400 - 696 ksi | Average value: 3.88 GPa Grade Count:7 |
| | 1.95 - 3.25 GPa @Temperature 60.0 - 120 °C | 283 - 471 ksi @Temperature 140 - 248 °F | Average value: 2.59 GPa Grade Count:1 |

| Izod Impact, Notched Mechanical Properties | 0.374 - 0.800 J/cm Metric | 0.700 - 1.50 ft-lb/in English | Average value: 0.544 J/cm Grade Count:1 |
|---|--|--|--|
| | 0.400 - 0.450 J/cm @Temperature -40.0 - - 20.0 °C | 0.749 - 0.843 ft-lb/in @Temperature -40.0 - - 4.00 °F | Average value: 0.425 J/cm Grade Count:1 |
| Izod Impact, Unnotched | 3.20 - 4.81 J/cm | 6.00 - 9.00 ft-lb/in | Average value: 3.74 J/cm Grade Count:4 |
| Charpy Impact Unnotched | 1.70 - 1.70 J/cm ² @Temperature -40.0 - - 20.0 °C | 8.09 - 8.09 ft-lb/in ² @Temperature -40.0 - - 4.00 °F | Average value: 1.70 J/cm ² Grade Count:1 |

| Thermal Properties | Metric | English | Comments |
|--|--------------|--------------|-------------------------------------|
| Deflection Temperature at 0.46 MPa (66 psi) | 132 - 163 °C | 270 - 325 °F | Average value: 145 °C Grade Count:6 |
| Deflection Temperature at 1.8 MPa (264 psi) | 125 - 145 °C | 257 - 293 °F | Average value: 135 °C Grade Count:9 |
| Flammability, UL94 | HB | HB | Grade Count:7 |

| Electrical Properties | Metric | English | Comments |
|------------------------|-------------------------------|-------------------------------|---|
| Electrical Resistivity | 1.00e+15 - 1.00e+16 ohm-cm | 1.00e+15 - 1.00e+16 ohm-cm | Average value: 8.20e+15 ohm-cm Grade Count:5 |

| Processing Properties | Metric | English | Comments |
|------------------------|----------------|-------------------|--|
| Processing Temperature | 193 - 240 °C | 380 - 464 °F | Average value: 212 °C Grade Count:5 |
| Melt Temperature | 195 - 302 °C | 383 - 576 °F | Average value: 232 °C Grade Count:3 |
| Mold Temperature | 18.0 - 71.0 °C | 64.4 - 160 °F | Average value: 46.9 °C Grade Count:8 |
| Injection Pressure | 68.9 - 103 MPa | 10000 - 15000 psi | Average value: 86.2 MPa Grade Count:4 |

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