

## Polykemi AB POLYfill PPC T12020 Polypropylene Copolymer, Mineral Reinforced

Category : Polymer , Thermoplastic , Polypropylene (PP) , Polypropylene Copolymer , Polypropylene with 20% Talc Filler

### Material Notes:

Information provided by Polykemi AB

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_Polykemi-AB-POLYfill-PPC-T12020-Polypropylene-Copolymer-Mineral-Reinforced.php](http://www.lookpolymers.com/polymer_Polykemi-AB-POLYfill-PPC-T12020-Polypropylene-Copolymer-Mineral-Reinforced.php)

| Physical Properties    | Metric                               | English                              | Comments              |
|------------------------|--------------------------------------|--------------------------------------|-----------------------|
| Density                | 1.05 g/cc                            | 0.0379 lb/in <sup>3</sup>            | ISO 1183              |
| Filler Content         | 20 %                                 | 20 %                                 | ±2%; Polykemi         |
| Linear Mold Shrinkage  | 0.010 - 0.013 cm/cm                  | 0.010 - 0.013 in/in                  | With Flow; ISO 2577   |
|                        | 0.010 - 0.013 cm/cm                  | 0.010 - 0.013 in/in                  | Across Flow; ISO 2577 |
| Melt Index of Compound | 12 g/10 min                          | 12 g/10 min                          | ISO 1133              |
|                        | @Load 2.16 kg,<br>Temperature 230 °C | @Load 4.76 lb,<br>Temperature 446 °F |                       |

| Mechanical Properties     | Metric                  | English                    | Comments |
|---------------------------|-------------------------|----------------------------|----------|
| Tensile Strength at Break | <= 29.0 MPa             | <= 4210 psi                | ISO/R527 |
| Elongation at Break       | 22 %                    | 22 %                       | ISO/R527 |
| Elongation at Yield       | 7.0 %                   | 7.0 %                      | ISO/R527 |
| Flexural Strength         | <= 49.0 MPa             | <= 7110 psi                | ISO 178  |
| Flexural Modulus          | 2.00 GPa                | 290 ksi                    | ISO 178  |
|                           | @Temperature 23.0 °C    | @Temperature 73.4 °F       |          |
| Charpy Impact Unnotched   | 2.10 J/cm <sup>2</sup>  | 9.99 ft-lb/in <sup>2</sup> | ISO 179  |
|                           | @Temperature -20.0 °C   | @Temperature -4.00 °F      |          |
| Charpy Impact Unnotched   | 4.10 J/cm <sup>2</sup>  | 19.5 ft-lb/in <sup>2</sup> | ISO 179  |
|                           | @Temperature 23.0 °C    | @Temperature 73.4 °F       |          |
| Charpy Impact, Notched    | 0.300 J/cm <sup>2</sup> | 1.43 ft-lb/in <sup>2</sup> | ISO 179  |
|                           | @Temperature -20.0 °C   | @Temperature -4.00 °F      |          |
| Charpy Impact, Notched    | 0.500 J/cm <sup>2</sup> | 2.38 ft-lb/in <sup>2</sup> | ISO 179  |
|                           | @Temperature 23.0 °C    | @Temperature 73.4 °F       |          |

| Thermal Properties                          | Metric             | English              | Comments          |
|---|--------------------|----------------------|-------------------|
| Deflection Temperature at 0.46 MPa (66 psi) | 112 °C             | 234 °F               | 120°C/h; ISO 75/1 |
| Deflection Temperature at 1.8 MPa (264 psi) | 62.0 °C            | 144 °F               | 120°C/h; ISO 75/1 |
| Vicat Softening Point                       | 58.0 °C            | 136 °F               | 50°C/h; ISO 306   |
|   | @Load 5.001 kg     | @Load 11.03 lb       |                   |
|   | 140 °C             | 284 °F               | 50°C/h; ISO 306   |
|   | @Load 1.00 kg      | @Load 2.21 lb        |                   |
| Flammability, UL94                          | HB                 | HB                   |                   |
|   | @Thickness 1.60 mm | @Thickness 0.0630 in |                   |

| Processing Properties | Metric          | English          | Comments               |
|-----------------------|-----------------|------------------|------------------------|
| Melt Temperature      | 205 - 260 °C    | 401 - 500 °F     |                        |
| Mold Temperature      | 40.0 - 80.0 °C  | 104 - 176 °F     |                        |
| Drying Temperature    | 70.0 - 80.0 °C  | 158 - 176 °F     |                        |
| Dry Time              | 2 - 4 hour      | 2 - 4 hour       | in circulation dryer   |
|                       | 2 - 4 hour      | 2 - 4 hour       | in desiccant air dryer |
| Injection Pressure    | 40.0 - 110 MPa  | 5800 - 16000 psi |                        |
| Back Pressure         | 1.00 - 2.00 MPa | 145 - 290 psi    |                        |

| Descriptive Properties | Value | Comments                |
|------------------------|-------|-------------------------|
| Holding Pressure ()    | 20-40 | % of injection pressure |
| Injection Speed ()     | High  |                         |

## 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