

SABIC Innovative Plastics Xenoy® 1731J PBT+PC (Asia Pacific)

Category : Polymer , Thermoplastic , Polycarbonate (PC) , Polycarbonate/Polybutylene Terephthalate (PBT) Blend, Unreinforced , Polyester, TP , Polybutylene Terephthalate (PBT)

Material Notes:

PBT+PC, Impact/chemical resistant. UV-Stabilized. Excellent physical property retention in automotive exteriors and OVAD. This data was supplied by SABIC-IP for the Asia Pacific region.

Order this product through the following link:

http://www.lookpolymers.com/polymer_SABIC-Innovative-Plastics-Xenoy-1731J-PBTPC-Asia-Pacific.php

| Physical Properties | Metric | English | Comments |
|------------------------------------|--|--|--|
| Specific Gravity | 1.22 g/cc | 1.22 g/cc | ASTM D 792 |
| Density | 1.22 g/cc | 0.0441 lb/in ³ | ISO 1183 |
| Moisture Absorption at Equilibrium | 0.080 % | 0.080 % | 23 ^o C / 50% RH; ISO 62 |
| Water Absorption at Saturation | 0.28 % @Temperature 23.0 ^o C | 0.28 % @Temperature 73.4 ^o F | ISO 62 |
| Linear Mold Shrinkage, Flow | 0.0065 - 0.0073 cm/cm @Thickness 3.20 mm | 0.0065 - 0.0073 in/in @Thickness 0.126 in | SABIC Method |
| Melt Flow | 8.0 g/10 min @Load 5.00 kg, Temperature 250 ^o C | 8.0 g/10 min @Load 11.0 lb, Temperature 482 ^o F | [cm ³ /10 min] Melt Volume Rate; ISO 1133 |
| | 9.6 g/10 min @Load 5.00 kg, Temperature 250 ^o C | 9.6 g/10 min @Load 11.0 lb, Temperature 482 ^o F | ASTM D 1238 |

| Mechanical Properties | Metric | English | Comments |
|---------------------------|----------|----------|---|
| Tensile Strength at Break | 57.0 MPa | 8270 psi | 50 mm/min; ISO 527 |
| | 60.0 MPa | 8700 psi | Type I, 50 mm/min; ASTM D 638 |
| Tensile Strength, Yield | 60.0 MPa | 8700 psi | Type I, 50 mm/min; ASTM D 638 |
| | 60.0 MPa | 8700 psi | 50 mm/min; ISO 527 |
| Elongation at Break | 104 % | 104 % | 50 mm/min; ISO 527 |
| | 108 % | 108 % | Type I, 50 mm/min; ASTM D 638 |
| | 240 % | 240 % | Type I, 10 mm/min; SABIC - Japan Method |

| Elongation at Yield Mechanical Properties | 5.0 % Metric | 5.0 % English | 50 mm/min; ISO 527 Comments |
|--|--|--|--|
| | 5.6 % | 5.6 % | Type I, 50 mm/min; ASTM D 638 |
| Tensile Modulus | 2.37 GPa | 344 ksi | 5 mm/min; ASTM D 638 |
| | 2.37 GPa | 344 ksi | 1 mm/min; ISO 527 |
| Flexural Yield Strength | 92.0 MPa | 13300 psi | 2 mm/min; ISO 178 |
| | 93.0 MPa | 13500 psi | 1.3 mm/min, 50 mm span; ASTM D 790 |
| Flexural Modulus | 2.12 GPa | 307 ksi | 1.3 mm/min, 50 mm span; ASTM D 790 |
| | 2.21 GPa | 321 ksi | 2 mm/min; ISO 178 |
| Izod Impact, Notched | 1.76 J/cm @Temperature -30.0 °C | 3.30 ft-lb/in @Temperature -22.0 °F | ASTM D 256 |
| | 8.14 J/cm @Temperature 23.0 °C | 15.2 ft-lb/in @Temperature 73.4 °F | ASTM D 256 |
| Izod Impact, Notched (ISO) | 16.0 kJ/m ² @Temperature -30.0 °C | 7.61 ft-lb/in ² @Temperature -22.0 °F | 80*10*4; ISO 180/1A |
| | 59.0 kJ/m ² @Temperature 23.0 °C | 28.1 ft-lb/in ² @Temperature 73.4 °F | 80*10*4; ISO 180/1A |
| Charpy Impact, Notched | 1.30 J/cm ² @Temperature -30.0 °C | 6.19 ft-lb/in ² @Temperature -22.0 °F | V-notch Edgew 80*10*4 sp=62mm; ISO 179/1eA |
| | 6.50 J/cm ² @Temperature 23.0 °C | 30.9 ft-lb/in ² @Temperature 73.4 °F | V-notch Edgew 80*10*4 sp=62mm; ISO 179/1eA |
| Impact Test | 58.0 J @Temperature 23.0 °C | 42.8 ft-lb @Temperature 73.4 °F | Instrumented Impact Total Energy; ASTM D 3763 |

| Thermal Properties | Metric | English | Comments |
|-------------------------------|--|---|------------|
| CTE, linear, Parallel to Flow | 83.2 Åµm/m-Å°C @Temperature -40.0 - 40.0 Å°C | 46.2 Åµin/in-Å°F @Temperature -40.0 - 104 Å°F | ASTM E 831 |

| Thermal Properties | 83.2 Åµm/m-Å°C Metric | 46.2 Åµin/in-Å°F English | Comments ISO 11359-2 |
|---|-------------------------------|------------------------------|----------------------------------|
| | @Temperature -40.0 - 40.0 Å°C | @Temperature -40.0 - 104 Å°F | |
| CTE, linear, Transverse to Flow | 83.5 Åµm/m-Å°C | 46.4 Åµin/in-Å°F | ASTM E 831 |
| | @Temperature -40.0 - 40.0 Å°C | @Temperature -40.0 - 104 Å°F | |
| | 83.5 Åµm/m-Å°C | 46.4 Åµin/in-Å°F | ISO 11359-2 |
| | @Temperature -40.0 - 40.0 Å°C | @Temperature -40.0 - 104 Å°F | |
| Deflection Temperature at 0.46 MPa (66 psi) | 116 Å°C | 241 Å°F | Flatw 80*10*4 sp=64mm; ISO 75/Bf |
| | 110 Å°C | 230 Å°F | unannealed; ASTM D 648 |
| | @Thickness 3.20 mm | @Thickness 0.126 in | |
| | 120 Å°C | 248 Å°F | unannealed; ASTM D 648 |
| | @Thickness 6.40 mm | @Thickness 0.252 in | |
| Deflection Temperature at 1.8 MPa (264 psi) | 98.0 Å°C | 208 Å°F | Flatw 80*10*4 sp=64mm; ISO 75/Af |
| | 92.0 Å°C | 198 Å°F | unannealed; ASTM D 648 |
| | @Thickness 3.20 mm | @Thickness 0.126 in | |
| | 105 Å°C | 221 Å°F | unannealed; ASTM D 648 |
| | @Thickness 6.40 mm | @Thickness 0.252 in | |
| Vicat Softening Point | 130 Å°C | 266 Å°F | Rate B/50; ASTM D 1525 |
| | 130 Å°C | 266 Å°F | Rate B/50; ISO 306 |
| | 131 Å°C | 268 Å°F | Rate B/120; ISO 306 |

| Descriptive Properties | Value | Comments |
|------------------------------------|-------|----------------|
| Ball Pressure Test, 75Å°C +/- 2Å°C | PASS | IEC 60695-10-2 |

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