

SABIC Innovative Plastics Valox[®] 7062HP PBT

Category : Polymer , Thermoplastic , Polyester, TP , Polybutylene Terephthalate (PBT)

Material Notes:

ENDURAN 7062HP is a 38% mineral filled & FDA compliance injection moulding resin.

Order this product through the following link:

http://www.lookpolymers.com/polymer_SABIC-Innovative-Plastics-Valox-7062HP-PBT.php

| Physical Properties | Metric | English | Comments |
|--------------------------------|---|---|---|
| Specific Gravity | 1.81 g/cc | 1.81 g/cc | ASTM D792 |
| Density | 1.81 g/cc | 0.0654 lb/in ³ | ISO 1183 |
| Moisture Absorption | 0.0700 % | 0.0700 % | 23 [°] C / 50% RH; ISO 62 |
| Water Absorption at Saturation | 0.070 % | 0.070 % | ISO 62 |
| Linear Mold Shrinkage, Flow | 0.012 - 0.019 cm/cm @Thickness 3.20 mm | 0.012 - 0.019 in/in @Thickness 0.126 in | SABIC Method |
| Melt Flow | 33 g/10 min @Load 1.20 kg, Temperature 266 [°] C | 33 g/10 min @Load 2.65 lb, Temperature 511 [°] F | ASTM D1238 |
| Melt Index of Compound | 21 g/10 min @Load 1.20 kg, Temperature 265 [°] C | 21 g/10 min @Load 2.65 lb, Temperature 509 [°] F | MVR [cm ³ /10 min]; ISO 1133 |
| | 41 g/10 min @Load 2.16 kg, Temperature 265 [°] C | 41 g/10 min @Load 4.76 lb, Temperature 509 [°] F | MVR [cm ³ /10 min]; ISO 1133 |

| Mechanical Properties | Metric | English | Comments |
|---------------------------|----------|-----------|-----------------------------|
| Hardness, H358/30 | 140 MPa | 20300 psi | ISO 2039-1 |
| Tensile Strength at Break | 55.0 MPa | 7980 psi | Type I, 5 mm/min; ASTM D638 |
| | 60.0 MPa | 8700 psi | 5 mm/min; ISO 527 |
| Tensile Strength, Yield | 53.0 MPa | 7690 psi | Type I, 5 mm/min; ASTM D638 |
| | 60.0 MPa | 8700 psi | 5 mm/min; ISO 527 |
| Elongation at Break | 3.0 % | 3.0 % | Type I, 5 mm/min; ASTM D638 |
| | 3.0 % | 3.0 % | 5 mm/min; ISO 527 |
| Elongation at Yield | 3.0 % | 3.0 % | Type I, 5 mm/min; ASTM D638 |

| Mechanical Properties | Metric | English | Comments ISO 527 |
|------------------------------|---|---|------------------------------------|
| Tensile Modulus | 4.12 GPa | 598 ksi | 5 mm/min; ASTM D638 |
| | 4.20 GPa | 609 ksi | 1 mm/min; ISO 527 |
| Flexural Strength | 100 MPa | 14500 psi | 2 mm/min; ISO 178 |
| | 110 MPa | 16000 psi | 1.3 mm/min, 50 mm span; ASTM D790 |
| Flexural Modulus | 3.90 GPa | 566 ksi | 2 mm/min; ISO 178 |
| | 4.48 GPa | 650 ksi | 1.3 mm/min, 50 mm span; ASTM D790 |
| Izod Impact, Notched | 0.210 J/cm | 0.393 ft-lb/in | ASTM D256 |
| | 0.260 J/cm @Temperature -30.0 °C | 0.487 ft-lb/in @Temperature -22.0 °F | ASTM D256 |
| Izod Impact, Unnotched | 4.23 J/cm | 7.92 ft-lb/in | ASTM D4812 |
| Izod Impact, Notched (ISO) | 3.00 kJ/m ² | 1.43 ft-lb/in ² | 80*10*4; ISO 180/1A |
| | 3.00 kJ/m ² @Temperature -30.0 °C | 1.43 ft-lb/in ² @Temperature -22.0 °F | 80*10*4; ISO 180/1A |
| Izod Impact, Unnotched (ISO) | 30.0 kJ/m ² | 14.3 ft-lb/in ² | 80*10*4; ISO 180/1U |
| | 30.0 kJ/m ² @Temperature -30.0 °C | 14.3 ft-lb/in ² @Temperature -22.0 °F | 80*10*4; ISO 180/1U |
| Charpy Impact Unnotched | 3.70 J/cm ² | 17.6 ft-lb/in ² | Edgew 80*10*4 sp=62mm; ISO 179/1eU |
| | 3.30 J/cm ² @Temperature -30.0 °C | 15.7 ft-lb/in ² @Temperature -22.0 °F | Edgew 80*10*4 sp=62mm; ISO 179/1eU |
| Charpy Impact, Notched | 0.200 J/cm ² | 0.952 ft-lb/in ² | Edgew 80*10*4 sp=62mm; ISO 179/1eA |
| | 0.200 J/cm ² @Temperature -30.0 °C | 0.952 ft-lb/in ² @Temperature -22.0 °F | Edgew 80*10*4 sp=62mm; ISO 179/1eA |
| Dart Drop, Total Energy | 5.00 J @Temperature 23.0 °C | 3.69 ft-lb @Temperature 73.4 °F | ASTM D3763 |

| Taber Abrasion, mg/1000 Cycles Mechanical Properties | 74 Metric | 74 English | CS-17, 1 kg; SABIC Method Comments |
|---|--|---|---------------------------------------|
| Thermal Properties | Metric | English | Comments |
| CTE, linear, Parallel to Flow | 90.0 $\mu\text{m}/\text{m}\cdot\text{Å}^\circ\text{C}$ | 50.0 $\mu\text{in}/\text{in}\cdot\text{Å}^\circ\text{F}$ | ASTM E 831 |
| | @Temperature -40.0 - 40.0 $\text{Å}^\circ\text{C}$ | @Temperature -40.0 - 104 $\text{Å}^\circ\text{F}$ | |
| | 90.0 $\mu\text{m}/\text{m}\cdot\text{Å}^\circ\text{C}$ | 50.0 $\mu\text{in}/\text{in}\cdot\text{Å}^\circ\text{F}$ | ISO 11359-2 |
| CTE, linear, Transverse to Flow | @Temperature 23.0 - 80.0 $\text{Å}^\circ\text{C}$ | @Temperature 73.4 - 176 $\text{Å}^\circ\text{F}$ | ISO 11359-2 |
| | 110 $\mu\text{m}/\text{m}\cdot\text{Å}^\circ\text{C}$ | 61.1 $\mu\text{in}/\text{in}\cdot\text{Å}^\circ\text{F}$ | ISO 11359-2 |
| | @Temperature 23.0 - 150 $\text{Å}^\circ\text{C}$ | @Temperature 73.4 - 302 $\text{Å}^\circ\text{F}$ | |
| CTE, linear, Parallel to Flow | 90.0 $\mu\text{m}/\text{m}\cdot\text{Å}^\circ\text{C}$ | 50.0 $\mu\text{in}/\text{in}\cdot\text{Å}^\circ\text{F}$ | ASTM E 831 |
| | @Temperature -40.0 - 40.0 $\text{Å}^\circ\text{C}$ | @Temperature -40.0 - 104 $\text{Å}^\circ\text{F}$ | |
| | 90.0 $\mu\text{m}/\text{m}\cdot\text{Å}^\circ\text{C}$ | 50.0 $\mu\text{in}/\text{in}\cdot\text{Å}^\circ\text{F}$ | ISO 11359-2 |
| CTE, linear, Transverse to Flow | @Temperature 23.0 - 80.0 $\text{Å}^\circ\text{C}$ | @Temperature 73.4 - 176 $\text{Å}^\circ\text{F}$ | ISO 11359-2 |
| | 110 $\mu\text{m}/\text{m}\cdot\text{Å}^\circ\text{C}$ | 61.1 $\mu\text{in}/\text{in}\cdot\text{Å}^\circ\text{F}$ | ISO 11359-2 |
| | @Temperature 23.0 - 150 $\text{Å}^\circ\text{C}$ | @Temperature 73.4 - 302 $\text{Å}^\circ\text{F}$ | |
| Thermal Conductivity | 0.320 W/m-K | 2.22 BTU-in/hr-ft $\text{Å}^2\cdot\text{Å}^\circ\text{F}$ | ISO 8302 |
| Deflection Temperature at 1.8 MPa (264 psi) | 65.0 $\text{Å}^\circ\text{C}$ | 149 $\text{Å}^\circ\text{F}$ | Edgew 120*10*4 sp=100mm; ISO 75/Ae |
| | 69.0 $\text{Å}^\circ\text{C}$ | 156 $\text{Å}^\circ\text{F}$ | unannealed; ASTM D648 |
| Vicat Softening Point | @Thickness 3.20 mm | @Thickness 0.126 in | |
| | 175 $\text{Å}^\circ\text{C}$ | 347 $\text{Å}^\circ\text{F}$ | Rate B/50; ASTM D1525 |
| | 175 $\text{Å}^\circ\text{C}$ | 347 $\text{Å}^\circ\text{F}$ | Rate B/50; ISO 306 |
| | 175 $\text{Å}^\circ\text{C}$ | 347 $\text{Å}^\circ\text{F}$ | Rate B/120; ISO 306 |
| | 215 $\text{Å}^\circ\text{C}$ | 419 $\text{Å}^\circ\text{F}$ | Rate A/50; ISO 306 |
| Descriptive Properties | Value | | Comments |
| Ball Pressure Test, 125 $\text{Å}^\circ\text{C}$ +/- 2 $\text{Å}^\circ\text{C}$ | PASSES | | 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