

## SABIC Innovative Plastics Lexan® XHT1143 PC (Asia Pacific)

Category : Polymer , Thermoplastic , Polycarbonate (PC)

### Material Notes:

XHT1143 is a high flow, UV stabilized, high heat polycarbonate copolymer. It is the lowest heat, UV stabilized product in the LEXAN® XHT portfolio. It is available in a range of opaque and limited transparent colors. 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-Lexan-XHT1143-PC-Asia-Pacific.php](http://www.lookpolymers.com/polymer_SABIC-Innovative-Plastics-Lexan-XHT1143-PC-Asia-Pacific.php)

| Physical Properties                | Metric                                              | English                                             | Comments                                             |
|------------------------------------|-----------------------------------------------------|-----------------------------------------------------|------------------------------------------------------|
| Density                            | 1.20 g/cc                                           | 0.0434 lb/in <sup>3</sup>                           | ISO 1183                                             |
| Moisture Absorption at Equilibrium | 0.30 %                                              | 0.30 %                                              | 23°C / 50% RH; ISO 62                                |
| Water Absorption at Saturation     | 0.30 %<br>@Temperature 23.0 °C                      | 0.30 %<br>@Temperature 73.4 °F                      | ISO 62                                               |
| Melt Flow                          | 16 g/10 min<br>@Load 1.20 kg,<br>Temperature 300 °C | 16 g/10 min<br>@Load 2.65 lb,<br>Temperature 572 °F | [cm <sup>3</sup> /10 min] Melt Volume Rate; ISO 1133 |
|                                    | 70 g/10 min<br>@Load 2.16 kg,<br>Temperature 330 °C | 70 g/10 min<br>@Load 4.76 lb,<br>Temperature 626 °F | [cm <sup>3</sup> /10 min] Melt Volume Rate; ISO 1133 |

| Mechanical Properties      | Metric                                          | English                                             | Comments            |
|----------------------------|-------------------------------------------------|-----------------------------------------------------|---------------------|
| Tensile Strength at Break  | 60.0 MPa                                        | 8700 psi                                            | 50 mm/min; ISO 527  |
| Tensile Strength, Yield    | 65.0 MPa                                        | 9430 psi                                            | 50 mm/min; ISO 527  |
| Elongation at Break        | 80 %                                            | 80 %                                                | 50 mm/min; ISO 527  |
| Elongation at Yield        | 6.5 %                                           | 6.5 %                                               | 50 mm/min; ISO 527  |
| Tensile Modulus            | 2.40 GPa                                        | 348 ksi                                             | 1 mm/min; ISO 527   |
| Flexural Yield Strength    | 100 MPa                                         | 14500 psi                                           | 2 mm/min; ISO 178   |
| Flexural Modulus           | 2.40 GPa                                        | 348 ksi                                             | 2 mm/min; ISO 178   |
| Izod Impact, Notched (ISO) | 10.0 kJ/m <sup>2</sup><br>@Temperature -30.0 °C | 4.76 ft-lb/in <sup>2</sup><br>@Temperature -22.0 °F | 80*10*3; ISO 180/1A |
|                            | 14.0 kJ/m <sup>2</sup><br>@Temperature 23.0 °C  | 6.66 ft-lb/in <sup>2</sup><br>@Temperature 73.4 °F  | 80*10*3; ISO 180/1A |
|                            | NB                                              | NB                                                  |                     |

| Izod Impact, Unnotched (ISO) |                       | English               |                       | 80*10*3; ISO 180/1U                        |
|------------------------------|-----------------------|-----------------------|-----------------------|--------------------------------------------|
| Mechanical Properties        | Metric                |                       | @ Temperature 73.4 °F | Comments                                   |
|                              | NB                    | NB                    |                       | 80*10*3; ISO 180/1U                        |
|                              | @Temperature -30.0 °C | @Temperature -22.0 °F |                       |                                            |
| Charpy Impact Unnotched      | NB                    | NB                    |                       | Edgew 80*10*3 sp=62mm; ISO 179/1eU         |
|                              | @Temperature 23.0 °C  | @Temperature 73.4 °F  |                       |                                            |
|                              | NB                    | NB                    |                       | Edgew 80*10*3 sp=62mm; ISO 179/1eU         |
|                              | @Temperature -30.0 °C | @Temperature -22.0 °F |                       |                                            |
| Charpy Impact, Notched       | 1.20 J/cm²            | 5.71 ft-lb/in²        |                       | V-notch Edgew 80*10*3 sp=62mm; ISO 179/1eA |
|                              | @Temperature -30.0 °C | @Temperature -22.0 °F |                       |                                            |
|                              | 1.60 J/cm²            | 7.61 ft-lb/in²        |                       | V-notch Edgew 80*10*3 sp=62mm; ISO 179/1eA |
|                              | @Temperature 23.0 °C  | @Temperature 73.4 °F  |                       |                                            |

| Thermal Properties                          | Metric                       | English                     | Comments                         |
|---------------------------------------------|------------------------------|-----------------------------|----------------------------------|
| CTE, linear, Parallel to Flow               | 70.0 µm/m-°C                 | 38.9 µin/in-°F              | ISO 11359-2                      |
|                                             | @Temperature -40.0 - 40.0 °C | @Temperature -40.0 - 104 °F |                                  |
| CTE, linear, Transverse to Flow             | 70.0 µm/m-°C                 | 38.9 µin/in-°F              | ISO 11359-2                      |
|                                             | @Temperature -40.0 - 40.0 °C | @Temperature -40.0 - 104 °F |                                  |
| Deflection Temperature at 0.46 MPa (66 psi) | 144 °C                       | 291 °F                      | Flatw 80*10*4 sp=64mm; ISO 75/Bf |
| Deflection Temperature at 1.8 MPa (264 psi) | 132 °C                       | 270 °F                      | Flatw 80*10*4 sp=64mm; ISO 75/Af |
| Vicat Softening Point                       | 150 °C                       | 302 °F                      | Rate B/50; ISO 306               |
|                                             | 152 °C                       | 306 °F                      | Rate B/120; ISO 306              |

## 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