

## SABIC Innovative Plastics Lexan® LUX9616 PC (Asia Pacific)

Category : Polymer , Thermoplastic , Polycarbonate (PC)

### Material Notes:

Lexan LUX9616 is a flame retardant polycarbonate featuring non brominated and non chlorinated FR system with diffusion effective and thin wall FR performance. It intended to meet WEEE/RoHS requirements for various applications.

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_SABIC-Innovative-Plastics-Lexan-LUX9616-PC-Asia-Pacific.php](http://www.lookpolymers.com/polymer_SABIC-Innovative-Plastics-Lexan-LUX9616-PC-Asia-Pacific.php)

| Physical Properties            | Metric   | English  | Comments              |
|--------------------------------|--|--|-----------------------|
| Specific Gravity               | 1.20 g/cc  | 1.20 g/cc  | ASTM D792             |
| Density                        | 1.20 g/cc  | 0.0434 lb/in <sup>3</sup>                            | ISO 1183              |
| Moisture Absorption            | 0.150 %  | 0.150 %  | 23°C / 50% RH; ISO 62 |
| Water Absorption at Saturation | 0.35 %   | 0.35 %   | ISO 62                |
| Linear Mold Shrinkage, Flow    | 0.0060 - 0.0080 cm/cm<br>@Thickness 3.20 mm          | 0.0060 - 0.0080 in/in<br>@Thickness 0.126 in         | SABIC Method          |
| Melt Flow                      | 7.0 g/10 min<br>@Load 1.20 kg,<br>Temperature 300 °C | 7.0 g/10 min<br>@Load 2.65 lb,<br>Temperature 572 °F | ASTM D1238            |

| Mechanical Properties     | Metric   | English   | Comments                     |
|---------------------------|----------|-----------|------------------------------|
| Tensile Strength at Break | 58.0 MPa | 8410 psi  | 50 mm/min; ISO 527           |
|                           | 65.0 MPa | 9430 psi  | Type I, 50 mm/min; ASTM D638 |
| Tensile Strength, Yield   | 62.0 MPa | 8990 psi  | Type I, 50 mm/min; ASTM D638 |
|                           | 62.0 MPa | 8990 psi  | 50 mm/min; ISO 527           |
| Elongation at Break       | 75 %     | 75 %      | 50 mm/min; ISO 527           |
|                           | 80 %     | 80 %      | Type I, 50 mm/min; ASTM D638 |
| Elongation at Yield       | 6.0 %    | 6.0 %     | Type I, 50 mm/min; ASTM D638 |
|                           | 6.0 %    | 6.0 %     | 50 mm/min; ISO 527           |
| Tensile Modulus           | 2.23 GPa | 323 ksi   | 1 mm/min; ISO 527            |
|                           | 2.30 GPa | 334 ksi   | 5 mm/min; ASTM D638          |
| Flexural Strength         | 95.0 MPa | 13800 psi | 12.5 mm/min; ISO 178         |
|                           | 95.0 MPa | 13800 psi | 1.3 mm/min, 50 mm span; ASTM |

| Flexural Yield Strength<br>Mechanical Properties | Metric                 | English                    | D790<br>Comments                  |
|--|------------------------|----------------------------|-----------------------------------|
| Flexural Modulus                                 | 2.16 GPa               | 313 ksi                    | 1.3 mm/min, 50 mm span; ASTM D790 |
|  | 2.25 GPa               | 326 ksi                    | 2 mm/min; ISO 178                 |
| Izod Impact, Notched                             | 1.50 J/cm              | 2.81 ft-lb/in              | ASTM D256                         |
| Izod Impact, Notched (ISO)                       | 15.0 kJ/m <sup>2</sup> | 7.14 ft-lb/in <sup>2</sup> | 80*10*3; ISO 180/1A               |
| Dart Drop, Total Energy                          | 70.0 J                 | 51.6 ft-lb                 | ASTM D3763                        |
|  | @Temperature 23.0 °C   | @Temperature 73.4 °F       |                                   |

| Thermal Properties                          | Metric                       | English                     | Comments                         |
|---|------------------------------|-----------------------------|----------------------------------|
| CTE, linear, Parallel to Flow               | 68.0 µm/m-°C                 | 37.8 µin/in-°F              | ASTM E 831                       |
|   | @Temperature -40.0 - 40.0 °C | @Temperature -40.0 - 104 °F |                                  |
| CTE, linear, Transverse to Flow             | 67.0 µm/m-°C                 | 37.2 µin/in-°F              | ASTM E 831                       |
|   | @Temperature -40.0 - 40.0 °C | @Temperature -40.0 - 104 °F |                                  |
| Deflection Temperature at 1.8 MPa (264 psi) | 125 °C                       | 257 °F                      | Flatw 80*10*4 sp=64mm; ISO 75/Af |
|   | 125 °C                       | 257 °F                      | unannealed; ASTM D648            |
|   | @Thickness 3.20 mm           | @Thickness 0.126 in         |                                  |
| Vicat Softening Point                       | 141 °C                       | 286 °F                      | Rate B/50; ASTM D1525            |
| Flammability, UL94                          | V-0                          | V-0                         | UL 94                            |
|   | @Thickness 1.50 mm           | @Thickness 0.0591 in        |                                  |
| Glow Wire Test                              | 850 °C                       | 1560 °F                     | IEC 60695-2-13                   |
|   | 850 °C                       | 1560 °F                     | IEC 60695-2-13                   |
|   | 960 °C                       | 1760 °F                     | IEC 60695-2-12                   |
|   | @Thickness 1.00 mm           | @Thickness 0.0394 in        |                                  |

| Electrical Properties      | Metric        | English       | Comments |
|----------------------------|---------------|---------------|----------|
| Comparative Tracking Index | 175 - 250 V   | 175 - 250 V   | UL 746A  |
| Hot Wire Ignition, HWI     | 15 - 30 sec   | 15 - 30 sec   | UL 746A  |
| High Amp Arc Ignition, HAI | 60 - 120 arcs | 60 - 120 arcs | UL 746A  |

| Descriptive Properties            | Value  | Comments       |
|-----------------------------------|--------|----------------|
| Ball Pressure Test, 125°C +/- 2°C | PASSES | IEC 60695-10-2 |

## 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