

## Covestro Apec® HT KU 1-9371 High-Heat Polycarbonate

Category : Polymer , Thermoplastic , Polycarbonate (PC) , Polycarbonate, High Heat

### Material Notes:

Transparent and opaque shades possible. Applications: Lighting, automotive and household goods, light covers. Information provided by Bayer. As of 1 September 2015, Bayer MaterialScience was separated from Bayer AG and officially adopted its new name – Covestro.

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_Covestro-Apec-HT-KU-1-9371-High-Heat-Polycarbonate.php](http://www.lookpolymers.com/polymer_Covestro-Apec-HT-KU-1-9371-High-Heat-Polycarbonate.php)

| Physical Properties                | Metric                               | English                              | Comments              |
|------------------------------------|--------------------------------------|--------------------------------------|-----------------------|
| Density                            | 1.14 g/cc                            | 0.0412 lb/in <sup>3</sup>            |                       |
| Water Absorption                   | 0.40 %                               | 0.40 %                               | Saturation in water   |
| Moisture Absorption at Equilibrium | 0.20 %                               | 0.20 %                               | Equilibrium at 50% RH |
| Water Absorption at Saturation     | 0.40 %                               | 0.40 %                               |                       |
| Melt Flow                          | 4.0 g/10 min                         | 4.0 g/10 min                         |                       |
|                                    | @Load 2.16 kg,<br>Temperature 330 °C | @Load 4.76 lb,<br>Temperature 626 °F |                       |

| Mechanical Properties   | Metric                  | English                    | Comments |
|-------------------------|-------------------------|----------------------------|----------|
| Tensile Strength, Yield | 65.0 MPa                | 9430 psi                   |          |
| Elongation at Break     | 50 %                    | 50 %                       | Nominal  |
| Elongation at Yield     | 7.0 %                   | 7.0 %                      |          |
| Tensile Modulus         | 2.30 GPa                | 334 ksi                    |          |
| Charpy Impact Unnotched | NB                      | NB                         |          |
|                         | 0.600 J/cm <sup>2</sup> | 2.86 ft-lb/in <sup>2</sup> |          |
|                         | @Temperature -30.0 °C   | @Temperature -22.0 °F      |          |
| Charpy Impact, Notched  | 0.600 J/cm <sup>2</sup> | 2.86 ft-lb/in <sup>2</sup> |          |

| Thermal Properties                 | Metric               | English              | Comments |
|------------------------------------|----------------------|----------------------|----------|
| CTE, linear, Parallel to Flow      | 70.0 µm/m-°C         | 38.9 µin/in-°F       |          |
|                                    | @Temperature 20.0 °C | @Temperature 68.0 °F |          |
| CTE, linear, Transverse to Flow    | 70.0 µm/m-°C         | 38.9 µin/in-°F       |          |
|                                    | @Temperature 20.0 °C | @Temperature 68.0 °F |          |
| Deflection Temperature at 0.46 MPa | 195 °C               | 383 °F               |          |

| Thermal Properties                          | Metric             | English              | Comments |
|---------------------------------------------|--------------------|----------------------|----------|
| Deflection Temperature at 1.8 MPa (264 psi) | 179 °C             | 354 °F               |          |
| Vicat Softening Point                       | 203 °C             | 397 °F               |          |
| Flammability, UL94                          | HB                 | HB                   |          |
|                                             | @Thickness 1.60 mm | @Thickness 0.0630 in |          |
|                                             | HB                 | HB                   |          |
|                                             | @Thickness 3.00 mm | @Thickness 0.118 in  |          |
| Oxygen Index                                | 24 %               | 24 %                 |          |

| Electrical Properties      | Metric             | English            | Comments |
|----------------------------|--------------------|--------------------|----------|
| Electrical Resistivity     | >= 1.00e+15 ohm-cm | >= 1.00e+15 ohm-cm |          |
| Surface Resistance         | >= 1.00e+15 ohm    | >= 1.00e+15 ohm    |          |
| Dielectric Constant        | 2.8                | 2.8                |          |
|                            | @Frequency 100 Hz  | @Frequency 100 Hz  |          |
|                            | 2.8                | 2.8                |          |
|                            | @Frequency 1e+6 Hz | @Frequency 1e+6 Hz |          |
| Dielectric Strength        | 35.0 kV/mm         | 889 kV/in          |          |
| Dissipation Factor         | 0.0013             | 0.0013             |          |
|                            | @Frequency 100 Hz  | @Frequency 100 Hz  |          |
|                            | 0.0069             | 0.0069             |          |
|                            | @Frequency 1e+6 Hz | @Frequency 1e+6 Hz |          |
| Comparative Tracking Index | 600 V              | 600 V              |          |

## 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