



Model PC-681U(f1)(a)  
File Number: E56070



COMPANY

CHI MEI CORPORATION

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MODEL INFO

PC-681U(f1)(a)  
Polycarbonate (PC) "WONDERLITE", furnished as pellets  
(f1) – Suitable for outdoor use with respect to exposure to Ultraviolet Light, Water Exposure and Immersion in accordance with UL 746C.  
(a) – Ball pressure temperature is in accordance with IEC 60695-10-2 Method B.

| FLAMMABILITY PROPERTIES               | VALUE      | TEST METHOD     |
|---------------------------------------|------------|-----------------|
| Flammability                          |            | ANSI/UL 94      |
| 1.5 mm, Color: ALL                    | V-0        |                 |
| 3.0 mm, Color: ALL                    | 5VA<br>V-0 |                 |
| ISO/IEC FLAMMABILITY PROPERTIES       | VALUE      | TEST METHOD     |
| Flammability                          |            | IEC 60695-11-10 |
| 1.5 mm, Color: ALL                    | V-0        |                 |
| 3.0 mm, Color: ALL                    | V-0        |                 |
| Flammability<br>(3.0 mm, Color: ALL)  | 5VA        | IEC 60695-11-20 |
| Glow Wire Ignition Temperature (GWIT) |            | IEC 60695-2-13  |
| 1.5 mm                                | 825 °C     |                 |
| 3.0 mm                                | 850 °C     |                 |
| Glow Wire Flammability Index (GWFI)   |            | IEC 60695-2-12  |

|                                              |                 |                     |
|----------------------------------------------|-----------------|---------------------|
| 1.5 mm                                       | 960 °C          |                     |
| 3.0 mm                                       | 960 °C          |                     |
| <b>ELECTRICAL PROPERTIES</b>                 | <b>VALUE</b>    | <b>TEST METHOD</b>  |
| Hot-wire Ignition (HWI)                      |                 | UL 746A             |
| 1.5 mm                                       | PLC 3           |                     |
| 3.0 mm                                       | PLC 3           |                     |
| High Amp Arc Ignition (HAI)                  |                 | UL 746A             |
| 1.5 mm                                       | PLC 1           |                     |
| 3.0 mm                                       | PLC 1           |                     |
| Comparative Tracking Index (CTI)             | PLC 2           | UL 746A             |
| Dielectric Strength                          | 30 kV/mm        | ASTM D149           |
| High Voltage Arc Tracking Rate (HVTR)        | PLC 2           |                     |
| Volume Resistivity                           | 1.0E+14 ohms-cm | ASTM D257/IEC 60093 |
| High Voltage, Low Current Arc Resistance     | PLC 6           |                     |
| <b>THERMAL PROPERTIES</b>                    | <b>VALUE</b>    | <b>TEST METHOD</b>  |
| Relative Thermal Index - Electrical Strength |                 | UL 746B             |
| 1.5 mm                                       | 130 °C          |                     |
| 3.0 mm                                       | 130 °C          |                     |
| Relative Thermal Index - Mechanical Impact   |                 | UL 746B             |
| 1.5 mm                                       | 115 °C          |                     |
| 3.0 mm                                       | 120 °C          |                     |
| Relative Thermal Index - Mechanical Strength |                 | UL 746B             |
| 1.5 mm                                       | 125 °C          |                     |
| 3.0 mm                                       | 130 °C          |                     |
| Ball Pressure Temperature                    | 135 °C          |                     |
| <b>PHYSICAL PROPERTIES</b>                   | <b>VALUE</b>    | <b>TEST METHOD</b>  |
| Dimensional Change                           | 0.0 %           | ASTM D1042/ISO 2796 |

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