

**LONGLITE® PA 20G3-110**

Chang Chun Plastics Co., Ltd. (CCP Group) - Polyamide 66

**General Information**
**Product Description**

Polyamide 66, 15% glass-fiber reinforced for injection molding.

**General**

|                        |  |
|------------------------|--|
| Material Status        | • Commercial: Active   |
| Availability           | • Asia Pacific • Europe • North America  |
| Filler / Reinforcement | • Glass Fiber, 15% Filler by Weight  |
| Features               | • Chemical Resistant • Good Surface Finish • Wear Resistant<br>• Good Electrical Properties • High Heat Resistance |
| Processing Method      | • Injection Molding  |

**Properties <sup>1</sup>**

| Physical  | Nominal Value | Unit                  | Test Method |
|---|---------------|-----------------------|-------------|
| Density   | 1.24          | g/cm <sup>3</sup>     | ISO 1183    |
| Water Absorption (Equilibrium, 73°F, 50% RH)            | 1.7           | %                     | ISO 62      |
| Mechanical  | Nominal Value | Unit                  | Test Method |
| Tensile Stress  | 16000         | psi                   | ISO 527-2   |
| Tensile Strain (Break)                                  | 2.8           | %                     | ISO 527-2   |
| Flexural Modulus  | 725000        | psi                   | ISO 178     |
| Flexural Stress   | 25400         | psi                   | ISO 178     |
| Impact  | Nominal Value | Unit                  | Test Method |
| Charpy Notched Impact Strength (73°F)                   | 1.9           | ft·lb/in <sup>2</sup> | ISO 179     |
| Thermal   | Nominal Value | Unit                  | Test Method |
| Deflection Temperature Under Load (66 psi, Unannealed)  | 491           | °F                    | ISO 75-2/B  |
| Deflection Temperature Under Load (264 psi, Unannealed) | 482           | °F                    | ISO 75-2/A  |
| Melting Temperature (DSC)                               | 505           | °F                    | ISO 3146    |
| Electrical  | Nominal Value | Unit                  | Test Method |
| Surface Resistivity                                     | 1.0E+12       | ohms                  | IEC 60093   |
| Volume Resistivity                                      | 1.0E+17       | ohms·cm               | IEC 60093   |
| Electric Strength (0.0787 in)                           | 610           | V/mil                 | IEC 60243-1 |
| Flammability  | Nominal Value | Unit                  | Test Method |
| Flame Rating  | HB            |                       | UL 94       |

**Processing Information**

| Injection              | Nominal Value | Unit |
|------------------------|---------------|------|
| Drying Temperature     | 176           | °F   |
| Drying Time            | 4.0           | hr   |
| Suggested Max Moisture | 0.20          | %    |
| Rear Temperature       | 518 to 527    | °F   |
| Middle Temperature     | 536 to 545    | °F   |
| Front Temperature      | 545 to 554    | °F   |
| Mold Temperature       | 140 to 194    | °F   |
| Injection Pressure     | 5080 to 18100 | psi  |
| Injection Rate         | Moderate-Fast |      |
| Back Pressure          | 20.0 to 50.0  | psi  |
| Screw Speed            | 80 to 200     | rpm  |

