

## LONGLITE® PBT 5515F-104

Chang Chun Plastics Co., Ltd. (CCP Group) - *Polybutylene Terephthalate*

### General Information

#### Product Description

PBT 5515F-104 is a 15% glass fiber reinforced and flame retardant injection molding grade.  
(Halogen and Antimony Free)

#### General

|                        |                                     |                   |                 |
|------------------------|-------------------------------------|-------------------|-----------------|
| Material Status        | • Commercial: Active                |                   |                 |
| Availability           | • Asia Pacific                      | • Europe          | • North America |
| Filler / Reinforcement | • Glass Fiber, 15% Filler by Weight |                   |                 |
| Additive               | • Flame Retardant                   | • Impact Modifier | • Mold Release  |
| Features               | • Antimony Free                     | • Halogen Free    |                 |
|                        | • Flame Retardant                   | • Impact Modified |                 |
| Forms                  | • Pellets                           |                   |                 |
| Processing Method      | • Injection Molding                 |                   |                 |

### Properties <sup>1</sup>

| Physical                                                | Nominal Value | Unit                  | Test Method |
|---------------------------------------------------------|---------------|-----------------------|-------------|
| Density                                                 | 1.40          | g/cm <sup>3</sup>     | ISO 1183    |
| Molding Shrinkage                                       |               |                       | ISO 294-4   |
| Across Flow                                             | 0.90 to 1.2   | %                     |             |
| Flow                                                    | 0.30 to 0.60  | %                     |             |
| Water Absorption (Equilibrium, 73°F, 50% RH)            | 0.20          | %                     | ISO 62      |
| Mechanical                                              | Nominal Value | Unit                  | Test Method |
| Tensile Stress (Break)                                  | 10900         | psi                   | ISO 527-2   |
| Tensile Strain (Break)                                  | 2.5           | %                     | ISO 527-2   |
| Flexural Modulus                                        | 754000        | psi                   | ISO 178     |
| Flexural Stress                                         | 16700         | psi                   | ISO 178     |
| Impact                                                  | Nominal Value | Unit                  | Test Method |
| Charpy Notched Impact Strength (73°F)                   | 3.2           | ft·lb/in <sup>2</sup> | ISO 179/1eA |
| Thermal                                                 | Nominal Value | Unit                  | Test Method |
| Deflection Temperature Under Load (66 psi, Unannealed)  | 401           | °F                    | ISO 75-2/B  |
| Deflection Temperature Under Load (264 psi, Unannealed) | 374           | °F                    | ISO 75-2/A  |
| Melting Temperature <sup>2</sup>                        | 437           | °F                    | ISO 11357-3 |
| Electrical                                              | Nominal Value | Unit                  | Test Method |
| Surface Resistivity                                     | 1.0E+13       | ohms                  | IEC 60093   |
| Volume Resistivity                                      | > 1.0E+15     | ohms·cm               | IEC 60093   |
| Electric Strength (0.0787 in)                           | 580           | V/mil                 | IEC 60243-1 |
| Comparative Tracking Index                              | 450           | V                     | IEC 60112   |
| Flammability                                            | Nominal Value | Unit                  | Test Method |
| Flame Rating (0.031 in)                                 | V-0           |                       | UL 94       |

### Processing Information

| Injection              | Nominal Value | Unit |
|------------------------|---------------|------|
| Drying Temperature     | 248 to 284    | °F   |
| Drying Time            | 3.0 to 4.0    | hr   |
| Suggested Max Moisture | 0.040         | %    |
| Processing (Melt) Temp | 464 to 518    | °F   |
| Mold Temperature       | 104 to 176    | °F   |

