

## LONGLITE® PBT 3030-210XQ

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

### General Information

#### Product Description

PBT 3030-210XQ is a 30% glass fiber reinforced impact modified injection molding grade.

#### General

|                        |                                                                                                                                                                     |
|------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Material Status        | • Commercial: Active                                                                                                                                                |
| Availability           | • Asia Pacific • Europe • North America                                                                                                                             |
| Filler / Reinforcement | • Glass Fiber, 30% Filler by Weight                                                                                                                                 |
| Additive               | • Impact Modifier                                                                                                                                                   |
| Features               | • Chemical Resistant • Good Moldability • Wear Resistant<br>• Excellent Weather Resistance • High Heat Resistance<br>• Good Electrical Properties • Impact Modified |
| Processing Method      | • Injection Molding                                                                                                                                                 |

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

| Physical                                                | Nominal Value | Unit                  | Test Method |
|---------------------------------------------------------|---------------|-----------------------|-------------|
| Density                                                 | 1.51          | g/cm <sup>3</sup>     | ISO 1183    |
| Molding Shrinkage                                       |               |                       | ISO 294-4   |
| Across Flow : 0.0630 in                                 | 0.80 to 1.1   | %                     |             |
| Flow : 0.0630 in                                        | 0.10 to 0.40  | %                     |             |
| Mechanical                                              | Nominal Value | Unit                  | Test Method |
| Tensile Modulus                                         | 1.16E+6       | psi                   | ISO 527-1   |
| Tensile Stress                                          | 16700         | psi                   | ISO 527-2   |
| Tensile Strain (Break)                                  | 2.8           | %                     | ISO 527-2   |
| Flexural Modulus                                        | 928000        | psi                   | ISO 178     |
| Flexural Stress                                         | 24700         | psi                   | ISO 178     |
| Impact                                                  | Nominal Value | Unit                  | Test Method |
| Charpy Notched Impact Strength (73°F)                   | 5.7           | ft·lb/in <sup>2</sup> | ISO 179     |
| Charpy Unnotched Impact Strength (73°F)                 | 26            | ft·lb/in <sup>2</sup> | ISO 179     |
| Notched Izod Impact Strength (73°F)                     | 5.2           | ft·lb/in <sup>2</sup> | ISO 180     |
| Unnotched Izod Impact Strength (73°F)                   | 21            | ft·lb/in <sup>2</sup> | ISO 180     |
| Thermal                                                 | Nominal Value | Unit                  | Test Method |
| Deflection Temperature Under Load (66 psi, Unannealed)  | 410           | °F                    | ISO 75-2/B  |
| Deflection Temperature Under Load (264 psi, Unannealed) | 392           | °F                    | ISO 75-2/A  |
| Melting Temperature                                     | 437           | °F                    | DSC         |
| Electrical                                              | Nominal Value | Unit                  | Test Method |
| Surface Resistivity                                     | 1.0E+12       | ohms                  | IEC 60093   |
| Volume Resistivity                                      | 1.0E+14       | ohms·cm               | IEC 60093   |
| Electric Strength (0.0787 in)                           | 560           | V/mil                 | IEC 60243-1 |
| Arc Resistance                                          | 100           | sec                   | UL 746      |
| Flammability                                            | Nominal Value | Unit                  | Test Method |
| Flame Rating (0.031 in)                                 | HB            |                       | UL 94       |
| Fill Analysis                                           | Nominal Value | Unit                  | Test Method |
| Melt Viscosity (500°F, 1000 sec <sup>-1</sup> )         | 270           | Pa·s                  | ISO 11443   |

### Processing Information

| Injection          | Nominal Value | Unit |
|--------------------|---------------|------|
| Middle Temperature | 455 to 518    | °F   |
| Nozzle Temperature | 464 to 509    | °F   |
| Mold Temperature   | 104 to 248    | °F   |



|                    |                   |
|--------------------|-------------------|
| Injection Pressure | 7110 to 17100 psi |
| Injection Rate     | Moderate-Fast     |
| Holding Pressure   | 4270 to 11400 psi |
| Back Pressure      | 0.00 to 42.7 psi  |
| Screw Speed        | 60 to 120 rpm     |

Notes

<sup>1</sup> Typical properties: these are not to be construed as specifications.

