

LONGLITE® PBT 3030-200G

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

General Information

Product Description

PBT 3030-200G is a 30% glass bead reinforced injection molding grade.

General

| | |
|---------------------------|--|
| Material Status | • Commercial: Active |
| Availability | • Asia Pacific • Europe • North America |
| Filler / Reinforcement | • Glass Bead, 30% Filler by Weight |
| Features | • Chemical Resistant • Good Electrical Properties • High Heat Resistance • Excellent Weather Resistance • Good Moldability • Wear Resistant |
| Uses | • Automotive Applications |
| Automotive Specifications | • GM GMW15702-024431-PBT-GB30 |
| Processing Method | • Injection Molding |

Properties ¹

| Physical | Nominal Value | Unit | Test Method |
|---|---------------|-----------------------|-------------|
| Density | 1.52 | g/cm ³ | ISO 1183 |
| Melt Mass-Flow Rate (MFR) (250°C/2.16 kg) | 20 | g/10 min | ISO 1133 |
| Molding Shrinkage (0.0630 in) | 1.0 to 2.0 | % | ISO 294-4 |
| Mechanical | Nominal Value | Unit | Test Method |
| Tensile Modulus | 508000 | psi | ISO 527-1 |
| Tensile Stress | 7980 | psi | ISO 527-2 |
| Tensile Strain (Break) | 6.0 | % | ISO 527-2 |
| Flexural Modulus | 508000 | psi | ISO 178 |
| Flexural Stress | 13800 | psi | ISO 178 |
| Impact | Nominal Value | Unit | Test Method |
| Charpy Notched Impact Strength (73°F) | 1.2 | ft·lb/in ² | ISO 179 |
| Charpy Unnotched Impact Strength (73°F) | 12 | ft·lb/in ² | ISO 179 |
| Notched Izod Impact Strength (73°F) | 1.2 | ft·lb/in ² | ISO 180 |
| Unnotched Izod Impact Strength (73°F) | 9.5 | ft·lb/in ² | ISO 180 |
| Thermal | Nominal Value | Unit | Test Method |
| Deflection Temperature Under Load (66 psi, Unannealed) | 311 | °F | ISO 75-2/B |
| Deflection Temperature Under Load (264 psi, Unannealed) | 140 | °F | ISO 75-2/A |
| Melting Temperature | 437 | °F | DSC |
| Electrical | Nominal Value | Unit | Test Method |
| Surface Resistivity | 1.0E+13 | ohms | IEC 60093 |
| Volume Resistivity | 1.0E+13 | ohms·cm | IEC 60093 |
| Electric Strength (0.0787 in) | 480 | 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 |

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

¹ Typical properties: these are not to be construed as specifications.

