

HOPELEX PC-1220U

Polycarbonate resin

General Information

Description

- Hopelex PC-1220U is a low viscosity, clear polycarbonate, which is suitable for outdoor injection applications. Hopelex PC-1220U have UV stabilized ingredients to prevent degradation of final PC products from lights.

Applications

OUTDOOR AND LIGHT EXPOSED INJECTION PRODUCTS

Typical properties¹

| | Test Method | Typical value | Unit |
|--|-------------|---------------|---------------------|
| Physical | | | |
| Melt Flow Index, 300 °C, 1.2kg | ASTM D1238 | 22 | g/10min |
| Specific Gravity | ASTM D792 | 1.20 | |
| Mold Shrinkage | ASTM D955 | 0.5~0.7 | % |
| Mechanical | | | |
| Tensile Strength, yield, 50mm/min | ASTM D638 | 630 | kgf/cm ² |
| Tensile Elongation, break, 50mm/min | ASTM D638 | > 100 | % |
| Flexural Strength, yield, 10mm/min | ASTM D790 | 920 | kgf/cm ² |
| Flexural Modulus, 10mm/min | ASTM D790 | 24,000 | kgf/cm ² |
| IZOD Impact Strength, notched, 23 °C, 1/8" | ASTM D256 | 70 | kg-cm/cm |
| | ASTM D256 | - | kg-cm/cm |
| Thermal | | | |
| Heat Distortion Temp. 4.6kgf/cm ² | ASTM D648 | 139 | °C |
| | ASTM D648 | 128 | °C |
| Vicat Softening Temp. Rate B/50 | ASTM D1525 | 150 | °C |
| Optical | | | |
| Light Transmittance | ASTM D1003 | 89 | % |
| Haze | ASTM D1003 | < 0.8 | % |
| Refractive Index | ASTM D542 | 1.585 | |

Notes

ISO 9001, 14001, /TS 16949

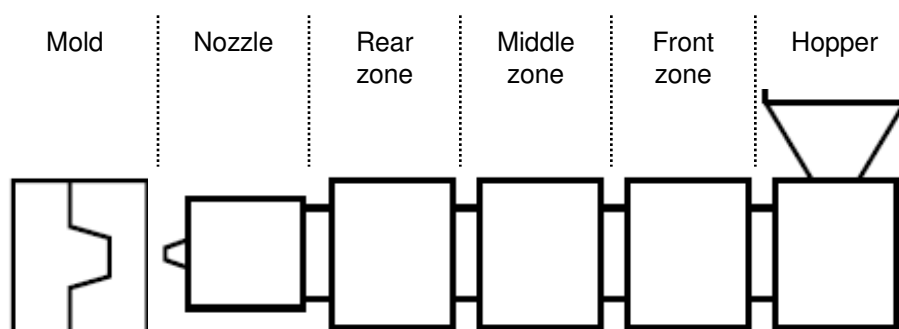
¹ Typical properties : these are not to be construed as specifications.

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Processing guides¹

| | Typical value | Unit |
|--------------------------|---------------|-----------|
| Drying condition | | |
| Drying temperature | 120 | °C |
| Drying time | 4 | hr |
| Maximum moisture content | 0.02 | % |
| Injection molding | | |
| Melt temperature | 290 ~ 310 | °C |
| Nozzle temperature | 280 ~ 300 | °C |
| Barrel | Rear zone | 290 ~ 310 |
| | Middle zone | 280 ~ 300 |
| | Front zone | 270 ~ 290 |
| Hopper temperature | 60 ~ 80 | °C |
| Mold temperature | 60 ~ 90 | °C |



Recycling

Sprues and runners can be reground with virgin resin within the ratio of 20%. Care must be taken to ensure that the regrind is free from impurities and regrind should not be used in applications where impact performance and/or agency compliance are required.

Notes

ISO 9001, 14001, /TS 16949

¹ Processing guides : Typical processing parameters are noted. Actual processing conditions will depend on machine size, mold design, material residence time, shot size, etc.