

PC-1100

Polycarbonate resin

General Information

- Description
- Medium viscosity, high impact strength
- High tensile strength, flexural strength, and elastic modulus

- Applications
- Injection Products

Typical properties

|                                           | Test Method         | Typical value | Unit    |
|-------------------------------------------|---------------------|---------------|---------|
| Physical                                  |                     |               |         |
| Melt Flow Index, 300℃, 1.2kg              | ASTM D1238          | 10            | 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/cm2 |
| Tensile Elongation,break,50mm/min         | ASTM D638           | >100          | %       |
| Flexural Strength, yield, 10mm/min        | ASTM D790           | 920           | kgf/cm2 |
| Flexural Modulus, 10mm/min                | ASTM D790           | 24,000        | kgf/cm2 |
| IZOD Impact Strength, notched, 23 ℃, 1/8" | ASTM D256           | 80            | kg·cm/c |
|                                           | notched, 23 ℃, 1/4" | -             | m       |
| Thermal                                   |                     |               | kg·cm/c |
| Heat Distortion Temp. 4.6kgf/cm2          | ASTM D648           | 143           | ℃       |
|                                           | 18.6kgf/cm2         | 132           | ℃       |
| Vicat Softening Temp. Rate B/50           | ASTM D1525          | 150           | ℃       |
| Optical                                   |                     |               |         |
| Light Transmittance                       | ASTM D1003          | 89            | %       |
| Haze Refractive                           | ASTM D1003          | < 0.8         | %       |
| Index                                     | ASTM D542           | 1.585         |         |

Notes

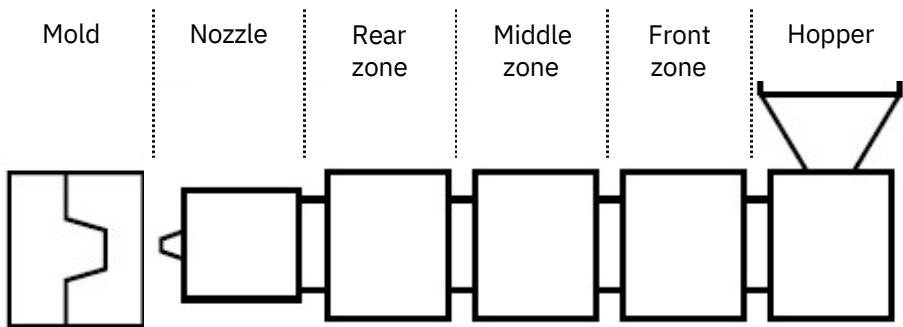
<sup>1</sup> Typical properties : these are not to be construed as specifications.

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Processing guides

|                          | 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

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