

# LOTTE CHEMICAL

## PC-1100

Polycarbonate resin

### General Information

#### Description

Medium viscosity  
Mold release

#### Applications

Extrusion & Injection Product

### Typical properties<sup>1</sup>

|                                              | Test Method | Typical value | Unit                |
|----------------------------------------------|-------------|---------------|---------------------|
| <b>Physical</b>                              |             |               |                     |
| Melt Flow Index, 300 °C, 1.2kg               | ASTM D1238  | 10            | g/10min             |
| Specific Gravity                             | ASTM D792   | 1.20          |                     |
| Mold Shrinkage                               | ASTM D955   | 0.5-0.7       | %                   |
| <b>Mechanical</b>                            |             |               |                     |
| Tensile Strength, yield, 50mm/min            | ASTM D638   | 630           | kgf/cm <sup>2</sup> |
| Tensile Elongation, break, 50mm/min          | ASTM D638   | >100          | %                   |
| Flexural Strength, yield, 10mm/min           | ASTM D790   | 920           | kgf/cm <sup>2</sup> |
| Flexural Modulus, 10mm/min                   | ASTM D790   | 24,000        | kgf/cm <sup>2</sup> |
| IZOD Impact Strength, notched, 23 °C, 1/8"   | ASTM D256   | 80            | kg-cm/cm            |
| notched, 23 °C, 1/4"                         | ASTM D256   | -             | kg-cm/cm            |
| <b>Thermal</b>                               |             |               |                     |
| Heat Distortion Temp. 4.6kgf/cm <sup>2</sup> | ASTM D648   | 143           | °C                  |
| 18.6kgf/cm <sup>2</sup>                      | ASTM D648   | 132           | °C                  |
| Vicat Softening Temp. Rate B/50              | ASTM D1525  | 150           | °C                  |
| <b>Optical</b>                               |             |               |                     |
| Light Transmittance                          | ASTM D1003  | 89            | %                   |
| Haze                                         | ASTM D1003  | < 0.8         | %                   |
| Refractive Index                             | ASTM D542   | 1.585         |                     |

### Notes

ISO 9001, 14001, /TS 16949

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

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### Processing guides<sup>1</sup>

|                          | Typical value | Unit      |
|--------------------------|---------------|-----------|
| <b>Drying condition</b>  |               |           |
| Drying temperature       | 120           | °C        |
| Drying time              | 4             | hr        |
| Maximum moisture content | 0.02          | %         |
| <b>Injection molding</b> |               |           |
| 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

<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.

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