

# HOPELEX TC-8001A

Polycarbonate compound resin

#### **General Information**

## Description

Thermal conductive, 30% mineral filled Medium viscosity, easy mold release Available in opaque color only

### Applications

Heat sinks, cooling units, electric/electronic housings, etc.

| Ţ  | Typical properties <sup>1</sup> |               |                                  |  |
|--|---------------------------------|---------------|----------------------------------|--|
|  | Test Method                     | Typical value | Unit                             |  |
| Physical   |                                 |               |                                  |  |
| Melt Flow Index, 300 °C, 1.2 kg                            | ASTM D1238                      | 20            | g/10min                          |  |
| Specific Gravity   | ASTM D792                       | 1.52          |                                  |  |
| Mold Shrinkage   | HPC method                      | 0.4 ~ 0.6     | %                                |  |
| Mechanical   |                                 |               |                                  |  |
| Tensile Strength, yield, 50 mm/min                         | ASTM D638                       | 430           | kg <sub>f</sub> /cm <sup>2</sup> |  |
| Tensile Elongation, break, 50 mm/min                       | ASTM D638                       | -             | %                                |  |
| Flexural Strength, yield, 10 mm/min                        | ASTM D790                       | 560           | kg <sub>f</sub> /cm <sup>2</sup> |  |
| Flexural Modulus, 10 mm/min                                | ASTM D790                       | 26,000        | kg <sub>f</sub> /cm <sup>2</sup> |  |
| IZOD Impact Strength, notched, 23°C, 1/8"                  | ASTM D256                       | 3             | kg <sub>f</sub> ·cm/cm           |  |
| notched, -30℃, 1/8"  | ASTM D256                       | -             | kg <sub>f</sub> ·cm/cm           |  |
| Thermal  |                                 |               |                                  |  |
| Thermal conductivity                                       | Hot-wire method                 | 0.6           | W/m·K                            |  |
| Heat Distortion Temp. 4.6 kg <sub>f</sub> /cm <sup>2</sup> | ASTM D648                       | -             | $^{\circ}$                       |  |
| 18.6 kg <sub>f</sub> /cm <sup>2</sup>                      | ASTM D648                       | 140           | $^{\circ}$                       |  |
| Vicat Softening Temp. Rate B/50                            | ASTM D1525                      | -             | $\mathbb{C}$                     |  |

**Notes** 

ISO 9001, 14001, /TS 16949

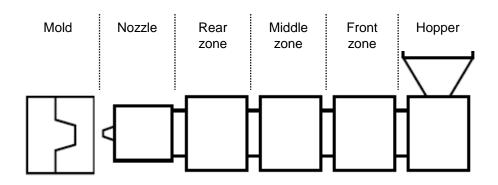
<sup>&</sup>lt;sup>1</sup> Typical properties : these are not to be construed as specifications.



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## Polycarbonate compound resin

| Processing guides <sup>1</sup> |             |               |               |  |
|--------------------------------|-------------|---------------|---------------|--|
|                                |             | Typical value | Unit          |  |
| Drying                         | condition   |               |               |  |
| Drying temperature             |             | 120           | $^{\circ}$    |  |
| Drying time                    |             | 4             | hr            |  |
| Maximum moisture content       |             | 0.02          | %             |  |
| Injectio                       | n molding   |               |               |  |
| Melt temperature               |             | 290 ~ 310     | °C            |  |
| Nozzle temperature             |             | 280 ~ 300     | °C            |  |
|                                | Rear zone   | 290 ~ 310     | ${\mathbb C}$ |  |
| Barrel                         | Middle zone | 280 ~ 300     | $^{\circ}$    |  |
|                                | Front zone  | 270 ~ 290     | $^{\circ}$    |  |
| Hopper                         | temperature | 60 ~ 80       | °C            |  |
| Mold temperature               |             | 60 ~ 90       | $^{\circ}$    |  |



# 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>&</sup>lt;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.