

## Properties

### 320, 320SF

ABS resin (UL94 HB)

| Properties                              | Test methods | Test conditions | Units       |                 |
|-----------------------------------------|--------------|-----------------|-------------|-----------------|
| Melt mass-flow rate                     | ISO 1133     | 220 deg C/10kg  | g/10min     | 17              |
| Mold shrinkage                          | ASTM D955    | -               | %           | 0.4-0.6         |
| Tensile strength                        | ISO 527      | -               | MPa         | 43              |
| Flexural strength                       | ISO 178      | -               | MPa         | 70              |
| Flexural modulus                        | ISO 178      | -               | MPa         | 2300            |
| Notched Charpy impact strength          | ISO 179/1eA  | 23 deg C        | kJ/m2       | 30              |
| Notched Charpy impact strength          | ISO 179/1eA  | -30 deg C       | kJ/m2       | 17              |
| Notched Izod impact strength            | ASTM D256    | 23 deg C/6.4mm  | J/m         | 300             |
| Notched Izod impact strength            | ASTM D256    | -30 deg C/6.4mm | J/m         | 150             |
| Rockwell hardness                       | ISO 2039     | -               | -           | R110            |
| Deflection temperature under load       | ISO 75       | 1.80MPa         | deg C       | 77              |
| Deflection temperature under load       | ASTM D648    | 1.82MPa/12.7mm  | deg C       | 87              |
| Vicat softening temperature             | ISO 306/B50  | 50N X 50deg C/h | deg C       | 93              |
| Ball pressure temperature               | -            | -               | deg C       | 90              |
| Coefficient of linear thermal expansion | ISO 11359    | MD              | X1E-5/deg C | 8               |
| Coefficient of linear thermal expansion | ISO 11359    | TD              | X1E-5/deg C | -               |
| Flammability                            | UL94         | -               | -           | HB<br>1.5-3.0mm |
| Water absorption                        | ISO 62       | -               | %           | 0.3             |
| Density                                 | ISO 1183     | -               | g/cm3       | 1.05            |

Note

•Values are typical, not quality assured.

•UL recognition File No. of Daicel Polymer is E47773.

### Typical settings for processing

| Preliminary drying   | Barrel temperature(deg C) |         |         |         | Screw rotation<br>(rpm) | Back pressure<br>(MPa) | Mold temperature<br>(deg C) |
|----------------------|---------------------------|---------|---------|---------|-------------------------|------------------------|-----------------------------|
|                      | Nozzle                    | Front   | Middle  | Back    |                         |                        |                             |
| 3-5hrs<br>80-85deg C | 210-230                   | 210-230 | 190-210 | 170-190 | 70-90                   | 10-20                  | 40-60                       |