

## ColorFast® PCC-141T

Americhem - Polycarbonate

### General Information

#### Product Description

11 melt UV-stabilized, transparent, injection molding grade Polycarbonate/Siloxane Copolymer, with good low temperature impact and ductility.

#### General

|                   |                                                                    |                                                        |                                                                                  |
|-------------------|--------------------------------------------------------------------|--------------------------------------------------------|----------------------------------------------------------------------------------|
| Material Status   | • Commercial: Active                                               |                                                        |                                                                                  |
| Availability      | • Africa & Middle East<br>• Asia Pacific                           | • Europe<br>• Latin America                            | • North America                                                                  |
| Features          | • Excellent Colorability                                           |                                                        |                                                                                  |
| Uses              | • Automotive Applications<br>• Closures<br>• Consumer Applications | • Engineering Parts<br>• Household Goods<br>• Housings | • Industrial Applications<br>• Industrial Parts<br>• Office Automation Equipment |
| Forms             | • Pellets                                                          |                                                        |                                                                                  |
| Processing Method | • Injection Molding                                                |                                                        |                                                                                  |

### Properties <sup>1</sup>

| Physical                                                          | Nominal Value    | Unit     | Test Method |
|-------------------------------------------------------------------|------------------|----------|-------------|
| Density / Specific Gravity                                        | 1.20             |          | ASTM D792   |
| Melt Mass-Flow Rate (MFR) (300°C/1.2 kg)                          | 11               | g/10 min | ASTM D1238  |
| Molding Shrinkage - Flow (0.125 in)                               | 5.0E-3 to 7.0E-3 | in/in    | ASTM D955   |
| Water Absorption (24 hr)                                          | 0.15             | %        | ASTM D570   |
| Mechanical                                                        | Nominal Value    | Unit     | Test Method |
| Tensile Strength <sup>2</sup> (Yield)                             | 8900             | psi      | ASTM D638   |
| Tensile Elongation <sup>2</sup> (Yield)                           | 6.0              | %        | ASTM D638   |
| Tensile Elongation <sup>2</sup> (Break)                           | 120              | %        | ASTM D638   |
| Flexural Modulus <sup>2</sup>                                     | 300000           | psi      | ASTM D790   |
| Flexural Strength <sup>2</sup>                                    | 12000            | psi      | ASTM D790   |
| Impact                                                            | Nominal Value    | Unit     | Test Method |
| Notched Izod Impact                                               |                  |          | ASTM D256   |
| -22°F                                                             | 13               | ft·lb/in |             |
| 73°F                                                              | 15               | ft·lb/in |             |
| Hardness                                                          | Nominal Value    | Unit     | Test Method |
| Rockwell Hardness (M-Scale)                                       | 70               |          | ASTM D785   |
| Thermal                                                           | Nominal Value    | Unit     | Test Method |
| Deflection Temperature Under Load (264 psi, Unannealed, 0.250 in) | 255              | °F       | ASTM D648   |
| Flammability                                                      | Nominal Value    | Unit     | Test Method |
| Flame Rating (0.06 in)                                            | HB               |          | UL 94       |

### Processing Information

| Injection              | Nominal Value | Unit |
|------------------------|---------------|------|
| Drying Temperature     | 250           | °F   |
| Drying Time            | 3.0 to 4.0    | hr   |
| Drying Time, Maximum   | 48            | hr   |
| Suggested Shot Size    | 40 to 60      | %    |
| Rear Temperature       | 520 to 560    | °F   |
| Middle Temperature     | 540 to 580    | °F   |
| Front Temperature      | 560 to 600    | °F   |
| Nozzle Temperature     | 550 to 590    | °F   |
| Processing (Melt) Temp | 560 to 600    | °F   |



|                  |                     |
|------------------|---------------------|
| Mold Temperature | 160 to 200 °F       |
| Back Pressure    | 50.0 to 100 psi     |
| Screw Speed      | 40 to 70 rpm        |
| Vent Depth       | 1.0E-3 to 3.0E-3 in |

Notes

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

<sup>2</sup> 2.0 in/min

