

## Electrafil® J-1200/CF/30 NT

Techmer Polymer Modifiers - *Acrylonitrile Butadiene Styrene*

### General Information

#### General

|                        |                                      |
|------------------------|--------------------------------------|
| Material Status        | • Commercial: Active                 |
| Availability           | • North America                      |
| Filler / Reinforcement | • Carbon Fiber, 30% Filler by Weight |
| Processing Method      | • Injection Molding                  |

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

| Physical                            | Nominal Value    | Unit     | Test Method |
|-------------------------------------|------------------|----------|-------------|
| Density / Specific Gravity          | 1.21             |          | ASTM D792   |
| Molding Shrinkage - Flow (0.125 in) | 5.0E-3 to 7.0E-3 | in/in    | ASTM D955   |
| Mechanical                          | Nominal Value    | Unit     | Test Method |
| Tensile Modulus                     | 2.10E+8          | psi      | ASTM D638   |
| Tensile Stress (Yield)              | 14500            | psi      | ISO 527-2   |
| Tensile Stress (Break)              | 13800            | psi      | ISO 527-2   |
| Tensile Strain (Break)              | 0.80             | %        | ISO 527-2   |
| Flexural Modulus                    | 2.55E+6          | psi      | ISO 178     |
| Flexural Stress                     | 20300            | psi      | ISO 178     |
| Impact                              | Nominal Value    | Unit     | Test Method |
| Notched Izod Impact (0.125 in)      | 2.4              | ft·lb/in | ASTM D256   |
| Electrical                          | Nominal Value    | Unit     | Test Method |
| Surface Resistivity                 | 1.0E+2 to 1.0E+6 | ohms     | ASTM D257   |

### Processing Information

| Injection              | Nominal Value | Unit |
|------------------------|---------------|------|
| Drying Temperature     | 180           | °F   |
| Drying Time            | 2.0 to 3.0    | hr   |
| Rear Temperature       | 450 to 480    | °F   |
| Middle Temperature     | 460 to 490    | °F   |
| Front Temperature      | 470 to 500    | °F   |
| Nozzle Temperature     | 475 to 505    | °F   |
| Processing (Melt) Temp | 465 to 505    | °F   |
| Mold Temperature       | 100 to 175    | °F   |
| Injection Rate         | Slow          |      |
| Back Pressure          | 25.0 to 100   | psi  |
| Screw Speed            | Slow-Moderate |      |

### Notes

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

