

**HiFill FR® J-1/30/FR NAT**

 Techmer Polymer Modifiers - *Polyamide 66*
**General Information**
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|                        |                      |
|------------------------|----------------------|
| Material Status        | • Commercial: Active |
| Availability           | • North America      |
| Filler / Reinforcement | • Glass Fiber        |
| Additive               | • Flame Retardant    |
| Features               | • Flame Retardant    |
| Appearance             | • Natural Color      |
| Processing Method      | • Injection Molding  |

**Properties <sup>1</sup>**

| <b>Physical</b>                     | <b>Nominal Value</b> | <b>Unit</b> | <b>Test Method</b> |
|-------------------------------------|----------------------|-------------|--------------------|
| Density / Specific Gravity          | 1.71                 |             | ASTM D792          |
| Molding Shrinkage - Flow (0.125 in) | 6.0E-3 to 8.0E-3     | in/in       | ASTM D955          |
| <b>Mechanical</b>                   | <b>Nominal Value</b> | <b>Unit</b> | <b>Test Method</b> |
| Tensile Modulus                     | 1.64E+6              | psi         | ASTM D638          |
| Tensile Strength (Yield)            | 23000                | psi         | ASTM D638          |
| Tensile Strength (Break)            | 22500                | psi         | ASTM D638          |
| Tensile Elongation (Break)          | 2.0                  | %           | ASTM D638          |
| Flexural Modulus                    | 1.87E+6              | psi         | ASTM D790          |
| Flexural Strength                   | 31500                | psi         | ASTM D790          |
| <b>Impact</b>                       | <b>Nominal Value</b> | <b>Unit</b> | <b>Test Method</b> |
| Notched Izod Impact (0.125 in)      | 1.7                  | ft·lb/in    | ASTM D256          |
| <b>Flammability</b>                 | <b>Nominal Value</b> | <b>Unit</b> | <b>Test Method</b> |
| Flame Rating (0.12 in)              | V-0                  |             | UL 94              |

**Processing Information**

| <b>Injection</b>       | <b>Nominal Value</b> | <b>Unit</b> |
|------------------------|----------------------|-------------|
| Drying Temperature     | 180                  | °F          |
| Drying Time            | 2.0 to 3.0           | hr          |
| Rear Temperature       | 510 to 540           | °F          |
| Middle Temperature     | 520 to 550           | °F          |
| Front Temperature      | 530 to 560           | °F          |
| Nozzle Temperature     | 540 to 570           | °F          |
| Processing (Melt) Temp | 520 to 565           | °F          |
| Mold Temperature       | 175 to 250           | °F          |
| Injection Rate         | Slow                 |             |
| Back Pressure          | 0.00 to 50.0         | psi         |
| Screw Speed            | Slow-Moderate        |             |

