# Starex BF-0670T

## Lotte Chemical Corporation - Methyl Methacrylate / ABS

### General Information

**General**

| | |
|---|---|
| Uses | • Electrical/Electronic Applications |

### Properties [1]

| Physical | Nominal Value | Unit | Test Method |
|---|---|---|---|
| Density / Specific Gravity (Natural) | 1.12 | | ASTM D792 |
| Density (Natural) | 1.12 | g/cm³ | ISO 1183 |
| Melt Mass-Flow Rate (MFR) (220°C/10.0 kg) | 25 | g/10 min | ASTM D1238 |
| Melt Mass-Flow Rate (MFR) (220°C/10.0 kg) | 24 | g/10 min | ISO 1133 |
| Molding Shrinkage - Flow (0.126 in) | 3.0E-3 | in/in | ASTM D955 |
| Molding Shrinkage - Across Flow (0.126 in) | 3.0E-3 | in/in | ASTM D955 |
| Molding Shrinkage | | | ISO 294-4 |
| Across Flow : 0.0787 in | 0.40 | % | |
| Flow : 0.0787 in | 0.40 | % | |
| **Mechanical** | **Nominal Value** | **Unit** | **Test Method** |
| Tensile Modulus [2] | 302000 | psi | ASTM D638 |
| Tensile Modulus | 363000 | psi | ISO 527-1/50 |
| Tensile Strength [2] (Yield) | 7110 | psi | ASTM D638 |
| Tensile Stress (Yield) | 7540 | psi | ISO 527-2/50 |
| Tensile Strength [2] (Break) | 5260 | psi | ASTM D638 |
| Tensile Stress (Break) | 5220 | psi | ISO 527-2/50 |
| Tensile Elongation [2] (Break) | 18 | % | ASTM D638 |
| Tensile Strain (Break) | 22 | % | ISO 527-2/50 |
| Flexural Modulus [3] | 341000 | psi | ASTM D790 |
| Flexural Modulus [4] | 342000 | psi | ISO 178 |
| Flexural Strength [3] | 9670 | psi | ASTM D790 |
| Flexural Stress [4] | 10200 | psi | ISO 178 |
| **Impact** | **Nominal Value** | **Unit** | **Test Method** |
| Charpy Notched Impact Strength [5] (73°F) | 3.8 | ft·lb/in² | ISO 179/1eA |
| Notched Izod Impact | | | ASTM D256 |
| 73°F, 0.125 in | 1.5 | ft·lb/in | |
| 73°F, 0.250 in | 1.2 | ft·lb/in | |
| Notched Izod Impact Strength [5] (73°F) | 3.5 | ft·lb/in² | ISO 180/1A |
| **Hardness** | **Nominal Value** | **Unit** | **Test Method** |
| Rockwell Hardness (R-Scale) | 114 | | ASTM D785 |
| Rockwell Hardness (R-Scale) | 115 | | ISO 2039-2 |
| Pencil Hardness | | | JIS K5401 |
| -- [6] | F | | |
| -- [7] | F | | |

# Starex BF-0670T

## Lotte Chemical Corporation - Methyl Methacrylate / ABS

| Thermal | Nominal Value | Unit | Test Method |
|---|---|---|---|
| Deflection Temperature Under Load | | | ASTM D648 |
| 66 psi, Unannealed, 0.252 in | 194 | °F | |
| Deflection Temperature Under Load | | | ISO 75-2/B |
| 66 psi, Unannealed, 0.157 in | 181 | °F | |
| Deflection Temperature Under Load | | | ISO 75-2/B |
| 66 psi, Annealed, 0.157 in | 198 | °F | |
| Deflection Temperature Under Load | | | ASTM D648 |
| 264 psi, Unannealed, 0.252 in | 176 | °F | |
| Deflection Temperature Under Load | | | ISO 75-2/A |
| 264 psi, Unannealed, 0.157 in | 162 | °F | |
| Deflection Temperature Under Load | | | ISO 75-2/A |
| 264 psi, Annealed, 0.157 in | 187 | °F | |
| Vicat Softening Temperature | | | |
| -- | 198 | °F | ISO 306/B120 |
| -- | • 198<br>• 194 | °F | ISO 306/B50 |

| Flammability | Nominal Value | Unit | Test Method |
|---|---|---|---|
| Flame Rating | | | UL 94 |
| 0.031 in | HB | | |
| 0.08 in | HB | | |
| 0.12 in | HB | | |

## Processing Information

| Injection | Nominal Value | Unit |
|---|---|---|
| Drying Temperature | | |
| Desiccant Dryer | 176 | °F |
| Hot Air Dryer | 185 | °F |
| Drying Time | | |
| Desiccant Dryer | 2.0 to 3.0 | hr |
| Hot Air Dryer | 2.0 to 4.0 | hr |
| Suggested Max Moisture | < 0.050 | % |
| Rear Temperature | 374 to 392 | °F |
| Middle Temperature | 410 to 428 | °F |
| Front Temperature | 446 to 464 | °F |
| Nozzle Temperature | 464 | °F |
| Mold Temperature | 104 to 176 | °F |
| Injection Pressure | 7110 to 35600 | psi |
| Back Pressure | 71.1 to 284 | psi |
| Screw Speed | 50 to 150 | rpm |

**Injection Notes**

Hot Runner Temperature: 240°C