

Starex SD-0150 W

Lotte Chemical Corporation - Acrylonitrile Butadiene Styrene

General Information

| General | |
|-----------------|-------------------|
| Uses | • General Purpose |
| RoHS Compliance | • RoHS Compliant |

Properties¹

| Physical | Nominal Value | Unit | Test Method |
|--------------------------------------------------------------------|------------------|-----------------------|--------------|
| Density (Natural) | 1.04 | g/cm ³ | ISO 1183 |
| Melt Mass-Flow Rate (MFR) (200°C/5.0 kg) | 2.0 | g/10 min | ASTM D1238 |
| Melt Mass-Flow Rate (MFR) (200°C/5.0 kg) | 2.2 | g/10 min | ISO 1133 |
| Molding Shrinkage - Flow (0.126 in) | 3.0E-3 to 6.0E-3 | in/in | ASTM D955 |
| Molding Shrinkage - Across Flow (0.126 in) | 3.0E-3 to 6.0E-3 | in/in | ASTM D955 |
| Mechanical | Nominal Value | Unit | Test Method |
| Tensile Strength ² (Yield) | 6600 | psi | ASTM D638 |
| Tensile Stress (Yield) | 6380 | psi | ISO 527-2/50 |
| Flexural Modulus ³ | 330000 | psi | ASTM D790 |
| Flexural Modulus ⁴ | 348000 | psi | ISO 178 |
| Flexural Strength ³ | 9340 | psi | ASTM D790 |
| Flexural Stress ⁴ | 10200 | psi | ISO 178 |
| Impact | Nominal Value | Unit | Test Method |
| Charpy Notched Impact Strength ⁵ (73°F) | 10 | ft-lb/in ² | ISO 179/1eA |
| Notched Izod Impact (73°F, 0.250 in) | 3.5 | ft-lb/in | ASTM D256 |
| Notched Izod Impact Strength ⁵ (73°F) | 9.5 | ft-lb/in ² | ISO 180/1A |
| Hardness | Nominal Value | Unit | Test Method |
| Rockwell Hardness (R-Scale) | 111 | | ASTM D785 |
| Rockwell Hardness (R-Scale) | 109 | | ISO 2039-2 |
| Thermal | Nominal Value | Unit | Test Method |
| Deflection Temperature Under Load 264 psi, Unannealed, 0.252 in | 188 | °F | ASTM D648 |
| Deflection Temperature Under Load 264 psi, Unannealed, 0.157 in | 180 | °F | ISO 75-2/A |
| Vicat Softening Temperature | 210 207 | °F | ISO 306/B50 |

Processing Information

| Injection | Nominal Value | Unit |
|------------------------|---------------|------|
| Drying Temperature | | |
| Desiccant Dryer | 176 | °F |
| Hot Air Dryer | 176 | °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 | % |

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| Injection | Nominal Value | Unit |
|--------------------|---------------|------|
| Rear Temperature | 320 to 356 | °F |
| Middle Temperature | 374 to 392 | °F |
| Front Temperature | 410 to 428 | °F |
| Nozzle Temperature | 446 | °F |
| Mold Temperature | 104 to 176 | °F |
| Injection Pressure | 7110 to 21300 | psi |
| Back Pressure | 71.1 to 284 | psi |
| Screw Speed | 50 to 150 | rpm |

Injection Notes

Hot Runner Temperature: 230°C