



| Starex SD-0150 U | | | |
|--|-------|----------------------------|-----------------|
| ABS | | Lotte Chemical Corporation | |
| Processing/Physical Characteristics | Value | Unit | Test Standard |
| ASTM Data | | | |
| Melt Flow Index | 1.7 | g/10min | ASTM D 1238 |
| Temperature | 200 | °C | - |
| Load | 5 | kg | - |
| Mold Shrinkage, MD | 0.003 | mm/mm | ASTM D 955 |
| Mold Shrinkage, TD | 0.003 | mm/mm | ASTM D 955 |
| Density | 1040 | kg/m³ | ASTM D 792 |
| | | | |
| Rheological properties | Value | Unit | Test Standard |
| ISO Data | | | |
| Molding shrinkage, parallel | 0.3 | % | ISO 294-4, 2577 |
| Molding shrinkage, normal | 0.3 | % | ISO 294-4, 2577 |
| Melt flow index, MFI | 1.7 | g/10min | ISO 1133 |
| MFI temperature | 200 | °C | - |
| MFI load | 5 | kg | - |
| | | | |
| Mechanical properties | Value | Unit | Test Standard |
| ISO Data | | | |
| Tensile Modulus | 2400 | MPa | ISO 527 |
| Yield stress | 41 | MPa | ISO 527 |
| Stress at break | 35 | MPa | ISO 527 |
| Strain at break | 14 | % | ISO 527 |
| Charpy notched impact strength, +23°C | 28 | kJ/m² | ISO 179/1eA |
| Flexural modulus, 23°C | 2100 | MPa | ISO 178 |
| Flexural strength | 59 | MPa | ISO 178 |
| Izod Impact notched, 23°C | 24 | kJ/m² | ISO 180/1A |
| Rockwell hardness | R 108 | - | ISO 2039-2 |
| ASTM Data | | | |
| Tensile Modulus | 2000 | MPa | ASTM D 638 |
| Tensile Strength at Yield | 40 | MPa | ASTM D 638 |
| Tensile Strength at Break | 44 | MPa | ASTM D 638 |
| Elongation at Break | 15 | % | ASTM D 638 |
| Flexural Modulus | 2100 | MPa | ASTM D 790 |
| Flexural Strength | 58 | MPa | ASTM D 790 |
| Rockwell Hardness | R 108 | - | ASTM D 785 |
| Izod Impact notched, 1/8 in | 280 | J/m | ASTM D 256 |
| Izod Impact notched, 1/4 in | 240 | J/m | ASTM D 256 |
| | | | |
| Thermal properties | Value | Unit | Test Standard |
| ISO Data | | | |
| Temp. of deflection under load, 1.80 MPa | 78 | °C | ISO 75-1/-2 |
| Temp. of deflection under load, 0.45 MPa | 91 | °C | ISO 75-1/-2 |
| Vicat softening temperature, 50°C/h 50N | 98 | °C | ISO 306 |
| ASTM Data | | | |
| DTUL @ 66 psi | 95 | °C | ASTM D 648 |
| DTUL @ 264 psi | 83 | °C | ASTM D 648 |
| | | | |
| Other properties | Value | Unit | Test Standard |
| ISO Data | | | |
| Density | 1040 | kg/m³ | ISO 1183 |
| | | | |

ABS

Lotte Chemical Corporation

| Processing Recommendation Injection Molding | Value | Unit | Test Standard |
|---|-----------|------|---------------|
| Pre-drying - Temperature | 80 - 80 | °C | - |
| Pre-drying - Time | 2 - 4 | h | - |
| Processing humidity | ≤0.05 | % | - |
| Melt temperature | 230 - 230 | °C | - |
| Mold temperature | 40 - 80 | °C | - |
| Zone 1 | 160 - 180 | °C | - |
| Zone 2 | 190 - 200 | °C | - |
| Zone 3 | 210 - 220 | °C | - |
| Nozzle temperature | 230 - 230 | °C | - |
| Screw speed | 50 - 150 | rpm | - |
| Injection pressure | 49 - 150 | MPa | - |
| Back pressure | 0.5 - 2 | MPa | - |

Processing

Pellets, Natural Color

Injection Molding