

Physical properties

■ **Grade** : SC-1220UR

| Item | Condition | Measuring Method | Unit | Representative |
|--------------------------------|--------------------------|------------------|------------------------------------|--------------------------------|
| Physical | | | | |
| Specific Gravity | Natural Color | ASTM D792 | - | 1.2 |
| Water Absorption | 23℃ | ASTM D570 | % | 0.2 |
| Melt Flow Index | 300℃ 1.2kg | ASTM D1238 | g/10min | 22 |
| Mold Shrinkage | - | ASTM D955 | % | 0.5-0.7 |
| Mechanical | | | | |
| Tensile Strength | 50mm/min | ASTM D638 | MPa (psi) kgf/cm ² | 63 (9,100) 640 |
| Elongation at Break | 5mm/min | ASTM D638 | % | 90 |
| Flexural Strength | 1.3mm/min | ASTM D790 | MPa (psi) kgf/cm ² | 90 (13,100) 920 |
| Flexural Modulus | 1.3mm/min | ASTM D790 | MPa (psi) kgf/cm ² | 2,260 (330,000) 23,000 |
| IZOD Impact Strength (notched) | 1/8 inch | ASTM D256 | J/m (ft·lbf/in) kgf·cm/cm | 736 (13.8) 75 |
| Rockwell Hardness | R-Scale | ASTM D785 | - | 120 |
| Thermal | | | | |
| Heat Deflection Temperature | 18.56kgf/cm ² | ASTM D648 | °F (°C) | 257 (125) |
| Heat Deflection Temperature | 4.6kgf/cm ² | ASTM D648 | °F (°C) | 275 (135) |
| Linear Thermal Coefficient | 40~100℃ | | x10 ⁻⁵ cm/cm/°C | 6-8 |
| Electric | | | | |
| Dielectric Constant | | | 10E6Hz | 2.9 |
| Dielectric Loss Tangent | | | 10E6Hz | 0.009 |

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|----------------|--|-----------|-----|-----|
| Arc Resistance | | ASTM D495 | Sec | 110 |
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| Optical | | | | |
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| Transmissivity | 3mm | ASTM D1003 | % | 89 |
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| HAZE | 3mm | ASTM D1003 | % | < 0.8 |
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| Flammability | | | | |
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| UL 94 Classification | 1.6 mm specimen | | ALL | V-2 |
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