

PRL ABS-FR

ABS

Polymer Resources, Ltd.

| Processing/Physical Characteristics | Value | Unit | Test Standard |
|-------------------------------------|-------|-------|---------------|
| ASTM Data | | | |
| Mold Shrinkage, MD | 0.006 | mm/mm | ASTM D 955 |

| Mechanical properties | Value | Unit | Test Standard |
|---------------------------------------|-------|-------------------|---------------|
| ISO Data | | | |
| Charpy notched impact strength, +23°C | 18.9 | kJ/m ² | ISO 179/1eA |
| Izod notched impact strength, +23°C | 18.9 | kJ/m ² | ISO 180/1A |
| Izod notched impact strength | 6.31 | kJ/m ² | ISO 180/1A |
| Temperature | -30 | °C | - |

| ASTM Data | Value | Unit | Test Standard |
|-----------------------------|-------|------|---------------|
| Tensile Modulus | 2275 | MPa | ASTM D 638 |
| Tensile Strength at Yield | 40.7 | MPa | ASTM D 638 |
| Tensile Strength at Break | 37.9 | MPa | ASTM D 638 |
| Elongation at Yield | 2.2 | % | ASTM D 638 |
| Elongation at Break | 10 | % | ASTM D 638 |
| Flexural Modulus | 2379 | MPa | ASTM D 790 |
| Flexural Strength | 62.1 | MPa | ASTM D 790 |
| Rockwell Hardness | R100 | - | ASTM D 785 |
| Izod Impact notched, 1/8 in | 214 | J/m | ASTM D 256 |

| Thermal properties | Value | Unit | Test Standard |
|--------------------|-------|------|---------------|
| ASTM Data | | | |
| UL 94 Flame rating | V-0 | - | UL 94 |
| Thickness tested | 1.5 | mm | - |
| DTUL @ 66 psi | 87.8 | °C | ASTM D 648 |
| DTUL @ 264 psi | 82.2 | °C | ASTM D 648 |
| Vicat Temperature | 90.6 | °C | ASTM D 1525 |

| Electrical properties | Value | Unit | Test Standard |
|-----------------------|-------|--------|---------------|
| ASTM Data | | | |
| Volume Resistivity | >1E15 | Ohm*cm | ASTM D 257 |

| Other properties | Value | Unit | Test Standard |
|------------------|-------|-------------------|---------------|
| Density | 1220 | kg/m ³ | ASTM D 792 |

| Processing Recommendation Injection Molding | Value | Unit | Test Standard |
|---|-------------|------|---------------|
| Pre-drying - Temperature | 82.2 - 93.3 | °C | - |
| Pre-drying - Time | 2 - 4 | h | - |
| Melt temperature | 204 - 232 | °C | - |
| Mold temperature | 48.9 - 71.1 | °C | - |
| Zone 1 | 171 - 182 | °C | - |
| Zone 2 | 199 - 210 | °C | - |
| Zone 3 | 210 - 221 | °C | - |

Characteristics**Processing**

Injection Molding

Delivery form

Pellets

Additives

Flame retarding agent

Special Characteristics

Flame retardant

Regional Availability

North America