

Technical Data Sheet
Type: Isoplast® 302EZ is an engineering thermoplastic resin.

Features: NSF Standard 61 Certified

| Properties | Test Method | English | | S.I. | |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|--------------------------|---------------------------|--------------------------|---------------------------|
| | | Values† | Units | Values† | Units |
| Physical | | | | | |
| Mold Shrinkage | ASTM D 955 | 0.004-0.006 | in/in | 0.004-0.006 | mm/mm |
| Specific Gravity | ASTM D 792 | 1.20 | | 1.20 | |
| Mechanical | | | | | |
| Tensile Strength at Yield | ASTM D 638 | 12,000 | psi | 83 | MPa |
| Tensile Strength at Break | ASTM D 638 | 10,000 | psi | 69 | MPa |
| Elongation at Yield | ASTM D 638 | 9 | % | 9 | % |
| Elongation at Break | ASTM D 638 | 90 | % | 90 | % |
| Tensile Modulus | ASTM D 638 | 280,000 | psi | 1,900 | MPa |
| Flexural Strength | ASTM D 790 | 14,000 | psi | 97 | MPa |
| Flexural Modulus | ASTM D 790 | 330,000 | psi | 2,300 | MPa |
| Izod Impact Strength Notched, 1/8" (3.2 mm), 73°F (23°C) Notched, 1/8" (3.2 mm), -40°F (-40°C) | ASTM D 256 | 2 1.1 | ft-lb/in ft-lb/in | 107 59 | J/m J/m |
| Instrumented Dart Impact Total Energy at 73°F (23°C) | ASTM D 3763 | 600 | in-lb | 68 | J |
| Rockwell Hardness R Scale M Scale | ASTM D 648 | 124 92 | | 124 92 | |
| Thermal | | | | | |
| Deflection Temperature Under Load 66 psi (0.45 MPa), unannealed 66 psi (0.45 MPa), annealed 264 psi (1.8 MPa), unannealed 264 psi (1.8 MPa), annealed | ASTM D 648 | 270 290 240 280 | °F °F °F °F | 132 143 116 138 | °C °C °C °C |
| Vicat Temperature | ASTM D 1525 | 297 | °F | 147 | °C |
| Coefficient of Linear Thermal Expansion | ASTM D 696 | 3.2 | 10 ⁻⁵ in/in/°F | 5.8 | 10 ⁻⁵ mm/mm/°C |
| Optical | | | | | |
| Light Transmission | ASTM D 1003 | 88 | % | 88 | % |
| Yellowness Index | ASTM D 1925 | 40 | | 40 | |
| Processing Information | | | | | |
| Recommended Drying Temperature | | 260-280 | °F | 127-138 | °C |
| Recommended Melt Temperature | | 460-500 | °F | 238-260 | °C |
| Recommended Mold Temperature | | 200-250 | °F | 93-121 | °C |

†Typical values, not to be construed as specifications. Users should confirm results by their own tests.

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