

DuPont™ Delrin®

acetal resin

Delrin® 900P BK602

Delrin® 900P BK602 is a low viscosity black acetal homopolymer resin for multicavity and thin wall molding. It offers an improved processing thermal stability.

| Property | Test Method | Units | Value |
|----------------------------------|-------------|-------------------|------------|
| Identification | | | |
| Resin Identification | ISO 1043 | | POM |
| Part Marking Code | ISO 11469 | | >POM< |
| Mechanical | | | |
| Yield Stress | ISO 527 | MPa (kpsi) | 70 (10.2) |
| Yield Strain | ISO 527 | % | 12 |
| Strain at Break | ISO 527 | % | 22 |
| Nominal Strain at Break | ISO 527 | % | 17 |
| Tensile Modulus | ISO 527 | MPa (kpsi) | 3300 (479) |
| Flexural Modulus | ISO 178 | MPa (kpsi) | 3000 (435) |
| Notched Charpy Impact Strength | ISO 179/1eA | kJ/m ² | |
| -30°C (-22°F) | | | 6 |
| 23°C (73°F) | | | 7 |
| Unnotched Charpy Impact Strength | ISO 179/1eU | kJ/m ² | 130 |

Contact DuPont for Material Safety Data Sheet, general guides and/or additional information about ventilation, handling, purging, drying, etc.
 ISO Mechanical properties measured at 4.0mm, ISO Electrical properties measured at 2.0mm, and all ASTM properties measured at 3.2mm.
 Test temperatures are 23°C unless otherwise stated.

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| Property | Test Method | Units | Value |
|---------------------------------------|-----------------|---------------|-------------|
| Thermal | | | |
| Deflection Temperature 0.45MPa | ISO 75-1/-2 | °C (°F) | 161 (322) |
| 1.80MPa | | | 98 (210) |
| Melting Temperature 10°C/min | ISO 11357-1/-3 | °C (°F) | 178 (352) |
| CLTE, Parallel | ISO 11359-1/-2 | E-4/C (E-4/F) | |
| -40 - 23°C (-40 - 73°F) | | | 0.90 (0.50) |
| 23 - 55°C (73 - 130°F) | | | 1.0 (0.56) |
| 55 - 100°C (130 - 212°F) | | | 1.3 (0.72) |
| CLTE, Normal | ISO 11359-1/-2 | E-4/C (E-4/F) | |
| -40 - 23°C (-40 - 73°F) | | | 0.9 (0.5) |
| 23 - 55°C (73 - 130°F) | | | 1.0 (0.56) |
| 55 - 100°C (130 - 212°F) | | | 1.3 (0.72) |
| Rheological | | | |
| Melt Mass-Flow Rate 190°C, 2.16kg | ISO 1133 | g/10 min | 25 |
| Flammability | | | |
| Flammability Classification 0.75mm | IEC 60695-11-10 | | HB |
| Flammability Classification 0.75mm | UL94 | | HB |
| Temperature Index | | | |
| RTI, Electrical 0.75mm | UL 746B | °C | 50 |
| 1.5mm | | | 110 |
| 3.0mm | | | 110 |

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| Property | Test Method | Units | Value | |
|---------------------------------|-------------|--|-------------------|----|
| Temperature Index | | | | |
| RTI, Impact | UL 746B | °C | | |
| 0.75mm | | | | 50 |
| 1.5mm | | | | 85 |
| 3.0mm | 90 | | | |
| RTI, Strength | UL 746B | °C | | |
| 0.75mm | | | | 50 |
| 1.5mm | | | | 90 |
| 3.0mm | 95 | | | |
| Other | | | | |
| Density | ISO 1183 | kg/m ³ (g/cm ³) | 1420 (1.42) | |
| Molding Shrinkage | ISO 294-4 | % | | |
| Normal, 2.0mm | | | 1.7 | |
| Parallel, 2.0mm | | | 1.8 | |
| Processing | | | | |
| Melt Temperature Range | | °C (°F) | 210-220 (410-430) | |
| Melt Temperature Optimum | | °C (°F) | 215 (420) | |
| Mold Temperature Range | | °C (°F) | 80-100 (175-210) | |
| Mold Temperature Optimum | | °C (°F) | 90 (195) | |
| Drying Time, Dehumidified Dryer | | h | 2-4 | |
| Drying Temperature | | °C (°F) | 80 (175) | |
| Processing Moisture Content | | % | <0.2 | |
| Hold Pressure Range | | MPa (kpsi) | 80-100 (12-15) | |

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