

# XENOVY™ RESIN 1102

REGION AMERICAS

## DESCRIPTION

Unreinforced PC/polyester alloy. Excellent low temperature impact/chemical resistance to automotive fluids.

## TYPICAL PROPERTY VALUES

| PROPERTIES                                   | TYPICAL VALUES | UNITS | TEST METHODS |
|----------------------------------------------|----------------|-------|--------------|
| <b>MECHANICAL</b>                            |                |       |              |
| Tensile Stress, yld, Type I, 50 mm/min       | 54             | MPa   | ASTM D 638   |
| Tensile Strain, brk, Type I, 50 mm/min       | 150            | %     | ASTM D 638   |
| Flexural Stress, yld, 1.3 mm/min, 50 mm span | 82             | MPa   | ASTM D 790   |
| Flexural Modulus, 1.3 mm/min, 50 mm span     | 1960           | MPa   | ASTM D 790   |
| <b>IMPACT</b>                                |                |       |              |
| Izod Impact, notched, 23°C                   | 800            | J/m   | ASTM D 256   |
| Izod Impact, notched, 0°C                    | 690            | J/m   | ASTM D 256   |
| Izod Impact, notched, -30°C                  | 640            | J/m   | ASTM D 256   |
| <b>THERMAL</b>                               |                |       |              |
| HDT, 0.45 MPa, 6.4 mm, unannealed            | 110            | °C    | ASTM D 648   |
| HDT, 1.82 MPa, 6.4 mm, unannealed            | 90             | °C    | ASTM D 648   |
| <b>PHYSICAL</b>                              |                |       |              |
| Specific Gravity                             | 1.19           | -     | ASTM D 792   |
| Specific Volume                              | 0.83           | cm³/g | ASTM D 792   |
| Mold Shrinkage, flow, 3.2 mm                 | 0.8 – 1        | %     | SABIC method |
| Mold Shrinkage, xflow, 3.2 mm                | 0.8 – 1        | %     | SABIC method |
| <b>INJECTION MOLDING</b>                     |                |       |              |
| Drying Temperature                           | 110            | °C    |              |
| Drying Time                                  | 4 – 6          | hrs   |              |
| Drying Time (Cumulative)                     | 8              | hrs   |              |
| Maximum Moisture Content                     | 0.02           | %     |              |
| Melt Temperature                             | 260 – 275      | °C    |              |
| Nozzle Temperature                           | 255 – 270      | °C    |              |
| Front - Zone 3 Temperature                   | 255 – 275      | °C    |              |
| Middle - Zone 2 Temperature                  | 250 – 270      | °C    |              |
| Rear - Zone 1 Temperature                    | 245 – 265      | °C    |              |
| Mold Temperature                             | 65 – 90        | °C    |              |
| Back Pressure                                | 0.3 – 0.7      | MPa   |              |
| Screw Speed                                  | 50 – 80        | rpm   |              |
| Shot to Cylinder Size                        | 50 – 80        | %     |              |
| Vent Depth                                   | 0.013 – 0.02   | mm    |              |