



# XENOY<sup>TM</sup> RESIN X2300WX

REGION AMERICAS

## DESCRIPTION

Unreinforced, opaque PC+PET alloy. Chemical resistance, dimensional stability/mechanical performance. UV-stabilized.

## TYPICAL PROPERTY VALUES

| PROPERTIES                                   | TYPICAL VALUES | UNITS    | TEST METHODS |
|----------------------------------------------|----------------|----------|--------------|
| <b>MECHANICAL</b>                            |                |          |              |
| Tensile Stress, yld, Type I, 50 mm/min       | 58             | MPa      | ASTM D 638   |
| Tensile Stress, brk, Type I, 50 mm/min       | 44             | MPa      | ASTM D 638   |
| Tensile Strain, yld, Type I, 50 mm/min       | 5              | %        | ASTM D 638   |
| Tensile Strain, brk, Type I, 50 mm/min       | 120            | %        | ASTM D 638   |
| Tensile Modulus, 50 mm/min                   | 2410           | MPa      | ASTM D 638   |
| Flexural Stress, yld, 1.3 mm/min, 50 mm span | 86             | MPa      | ASTM D 790   |
| Flexural Modulus, 1.3 mm/min, 50 mm span     | 2200           | MPa      | ASTM D 790   |
| <b>IMPACT</b>                                |                |          |              |
| Izod Impact, notched, 23°C                   | 640            | J/m      | ASTM D 256   |
| Instrumented Impact Total Energy, 23°C       | 48             | J        | ASTM D 3763  |
| <b>THERMAL</b>                               |                |          |              |
| HDT, 0.45 MPa, 3.2 mm, unannealed            | 126            | °C       | ASTM D 648   |
| HDT, 1.82 MPa, 3.2mm, unannealed             | 110            | °C       | ASTM D 648   |
| CTE, -40°C to 40°C, flow                     | 7.2E-05        | 1/°C     | ASTM E 831   |
| CTE, -40°C to 40°C, xflow                    | 7.2E-05        | 1/°C     | ASTM E 831   |
| <b>PHYSICAL</b>                              |                |          |              |
| Specific Gravity                             | 1.21           | -        | ASTM D 792   |
| Mold Shrinkage, flow, 3.2 mm                 | 0.8 – 1        | %        | SABIC method |
| Melt Flow Rate, 266°C/5.0 kgf                | 35             | g/10 min | ASTM D 1238  |
| <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 – 280      | °C       |              |
| Nozzle Temperature                           | 255 – 275      | °C       |              |
| Front - Zone 3 Temperature                   | 260 – 280      | °C       |              |
| Middle - Zone 2 Temperature                  | 255 – 275      | °C       |              |
| Rear - Zone 1 Temperature                    | 250 – 270      | °C       |              |
| Mold Temperature                             | 65 – 95        | °C       |              |
| Back Pressure                                | 0.3 – 0.6      | MPa      |              |
| Screw Speed                                  | 50 – 80        | rpm      |              |
| Shot to Cylinder Size                        | 50 – 80        | %        |              |
| Vent Depth                                   | 0.013 – 0.02   | mm       |              |