



**XYLEX™ Resin X8303CL**  
**Americas: COMMERCIAL**

PC+ POLYESTER, Transparent, Low processing Temperature, High flow with excellent impact, UV stabilized, OQ quality. For In Mold Decoration /Labeling.

| TYPICAL PROPERTIES <sup>1</sup>              | TYPICAL VALUE | Unit                | Standard    |
|----------------------------------------------|---------------|---------------------|-------------|
| <b>MECHANICAL</b>                            |               |                     |             |
| Tensile Stress, yld, Type I, 50 mm/min       | 460           | kgf/cm <sup>2</sup> | ASTM D 638  |
| Tensile Stress, brk, Type I, 50 mm/min       | 440           | kgf/cm <sup>2</sup> | ASTM D 638  |
| Tensile Strain, yld, Type I, 50 mm/min       | 5             | %                   | ASTM D 638  |
| Tensile Strain, brk, Type I, 50 mm/min       | 140           | %                   | ASTM D 638  |
| Tensile Modulus, 5 mm/min                    | 17100         | kgf/cm <sup>2</sup> | ASTM D 638  |
| Flexural Stress, yld, 1.3 mm/min, 50 mm span | 730           | kgf/cm <sup>2</sup> | ASTM D 790  |
| Flexural Modulus, 1.3 mm/min, 50 mm span     | 16500         | kgf/cm <sup>2</sup> | ASTM D 790  |
| Tensile Stress, yield, 50 mm/min             | 48            | MPa                 | ISO 527     |
| Tensile Stress, break, 50 mm/min             | 43            | MPa                 | ISO 527     |
| Tensile Strain, yield, 50 mm/min             | 6             | %                   | ISO 527     |
| Tensile Strain, break, 50 mm/min             | 140           | %                   | ISO 527     |
| Tensile Modulus, 1 mm/min                    | 1690          | MPa                 | ISO 527     |
| Flexural Stress, break, 2 mm/min             | 72            | MPa                 | ISO 178     |
| Flexural Modulus, 2 mm/min                   | 1720          | MPa                 | ISO 178     |
| <b>IMPACT</b>                                |               |                     |             |
| Izod Impact, notched, 23°C                   | 101           | cm-kgf/cm           | ASTM D 256  |
| Izod Impact, notched, -30°C                  | 10            | cm-kgf/cm           | ASTM D 256  |
| Instrumented Impact Total Energy, 23°C       | 662           | cm-kgf              | ASTM D 3763 |
| Izod Impact, notched 80*10*4 +23°C           | 20            | kJ/m <sup>2</sup>   | ISO 180/1A  |
| Izod Impact, notched 80*10*4 -30°C           | 9             | kJ/m <sup>2</sup>   | ISO 180/1A  |
| Charpy 23°C, V-notch Edgew 80*10*4 sp=62mm   | 14            | kJ/m <sup>2</sup>   | ISO 179/1eA |
| <b>THERMAL</b>                               |               |                     |             |
| Vicat Softening Temp, Rate B/50              | 98            | °C                  | ASTM D 1525 |



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|----------------------------------------|---------------|-------------------------|--------------|
| <b>THERMAL</b>                         |               |                         |              |
| HDT, 0.45 MPa, 3.2 mm, unannealed      | 92            | °C                      | ASTM D 648   |
| HDT, 1.82 MPa, 3.2mm, unannealed       | 80            | °C                      | ASTM D 648   |
| CTE, -40°C to 40°C, flow               | 9.E-05        | 1/°C                    | ASTM E 831   |
| CTE, -40°C to 40°C, xflow              | 9.E-05        | 1/°C                    | ASTM E 831   |
| CTE, 23°C to 60°C, flow                | 9.2E-05       | 1/°C                    | ISO 11359-2  |
| CTE, 23°C to 60°C, xflow               | 9.8E-05       | 1/°C                    | ISO 11359-2  |
| Vicat Softening Temp, Rate B/50        | 100           | °C                      | ISO 306      |
| Vicat Softening Temp, Rate B/120       | 100           | °C                      | ISO 306      |
| HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm  | 90            | °C                      | ISO 75/Af    |
| <b>PHYSICAL</b>                        |               |                         |              |
| Specific Gravity                       | 1.2           | -                       | ASTM D 792   |
| Mold Shrinkage, flow, 3.2 mm (5)       | 0.4 - 0.8     | %                       | SABIC Method |
| Melt Flow Rate, 265°C/2.16kgf          | 30            | g/10 min                | ASTM D 1238  |
| Density                                | 1.2           | g/cm <sup>3</sup>       | ISO 1183     |
| Water Absorption, (23°C/sat)           | 0.5           | %                       | ISO 62       |
| Moisture Absorption (23°C / 50% RH)    | 0.2           | %                       | ISO 62       |
| Melt Volume Rate, MVR at 265°C/2.16 kg | 27            | cm <sup>3</sup> /10 min | ISO 1133     |



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| PROCESSING PARAMETERS       | TYPICAL VALUE | Unit |
|-----------------------------|---------------|------|
| <b>Injection Molding</b>    |               |      |
| Drying Temperature          | 70 - 80       | °C   |
| Drying Time                 | 3 - 5         | hrs  |
| Maximum Moisture Content    | 0.02          | %    |
| Melt Temperature            | 240 - 270     | °C   |
| Nozzle Temperature          | 240 - 270     | °C   |
| Front - Zone 3 Temperature  | 240 - 270     | °C   |
| Middle - Zone 2 Temperature | 235 - 265     | °C   |
| Rear - Zone 1 Temperature   | 235 - 255     | °C   |
| Mold Temperature            | 50 - 70       | °C   |
| Screw Speed                 | 20 - 100      | rpm  |