



# LEXANT™ RESIN EX7631T

REGION AMERICAS

## DESCRIPTION

LEXANT™ EX7631T resin is a highly UV stabilized, 10 MFR polycarbonate. Release agent. Suitable for co-extrusion / cap layers. Exhibits low plate out and improved outdoor weathering on PC sheets.

## TYPICAL PROPERTY VALUES

| PROPERTIES                                   | TYPICAL VALUES | UNITS    | TEST METHODS |
|----------------------------------------------|----------------|----------|--------------|
| <b>MECHANICAL</b>                            |                |          |              |
| Tensile Stress, yld, Type I, 50 mm/min       | 70             | MPa      | ASTM D638    |
| Tensile Stress, brk, Type I, 50 mm/min       | 60             | MPa      | ASTM D638    |
| Tensile Strain, yld, Type I, 50 mm/min       | 5.4            | %        | ASTM D638    |
| Tensile Strain, brk, Type I, 50 mm/min       | 88.1           | %        | ASTM D638    |
| Tensile Modulus, 5 mm/min                    | 2450           | MPa      | ASTM D638    |
| Flexural Stress, yld, 1.3 mm/min, 50 mm span | 113            | MPa      | ASTM D790    |
| Flexural Modulus, 1.3 mm/min, 50 mm span     | 2580           | MPa      | ASTM D790    |
| <b>IMPACT</b>                                |                |          |              |
| Izod Impact, notched, 23°C                   | 77             | J/m      | ASTM D256    |
| Izod Impact, notched, -30°C                  | 73             | J/m      | ASTM D256    |
| Instrumented Dart Impact Total Energy, 23°C  | 72             | J        | ASTM D3763   |
| <b>THERMAL</b>                               |                |          |              |
| Vicat Softening Temp, Rate B/50              | 132            | °C       | ASTM D1525   |
| HDT, 0.45 MPa, 3.2 mm, unannealed            | 127            | °C       | ASTM D648    |
| HDT, 1.82 MPa, 3.2mm, unannealed             | 116            | °C       | ASTM D648    |
| CTE, -40°C to 40°C, flow                     | 6.E-05         | 1/°C     | ASTM E831    |
| CTE, -40°C to 40°C, xflow                    | 6.5E-05        | 1/°C     | ASTM E831    |
| Vicat Softening Temp, Rate B/120             | 135            | °C       | ISO 306      |
| <b>PHYSICAL</b>                              |                |          |              |
| Specific Gravity                             | 1.2            | -        | ASTM D792    |
| Mold Shrinkage, flow, 3.2 mm                 | 0.96           | %        | SABIC method |
| Melt Flow Rate, 300°C/1.2 kgf                | 10.5           | g/10 min | ASTM D1238   |
| Density                                      | 1.2            | g/cm³    | ISO 1183     |
| <b>SHEET EXTRUSION</b>                       |                |          |              |
| Drying Temperature                           | 100 – 110      | °C       |              |
| Drying Time                                  | 2 – 3          | Hrs      |              |
| Melt Temperature                             | 220 – 250      | °C       |              |
| Barrel - Zone 1 Temperature                  | 240 – 280      | °C       |              |
| Barrel - Zone 2 Temperature                  | 240 – 280      | °C       |              |
| Barrel - Zone 3 Temperature                  | 220 – 240      | °C       |              |
| Barrel - Zone 4 Temperature                  | 220 – 240      | °C       |              |
| Adapter Temperature                          | 220 – 240      | °C       |              |
| Die Temperature                              | 245 – 290      | °C       |              |
| Roll Stack Temp - Top                        | 175 – 180      | °C       |              |

| PROPERTIES                  | TYPICAL VALUES | UNITS | TEST METHODS |
|-----------------------------|----------------|-------|--------------|
| Roll Stack Temp - Middle    | 175 – 180      | °C    |              |
| Roll Stack Temp - Bottom    | 175 – 180      | °C    |              |
| PROFILE EXTRUSION           |                |       |              |
| Drying Temperature          | 100 – 110      | °C    |              |
| Drying Time                 | 2 – 3          | Hrs   |              |
| Melt Temperature            | 180 – 200      | °C    |              |
| Barrel - Zone 1 Temperature | 165 – 185      | °C    |              |
| Barrel - Zone 2 Temperature | 170 – 190      | °C    |              |
| Barrel - Zone 3 Temperature | 175 – 195      | °C    |              |
| Barrel - Zone 4 Temperature | 180 – 200      | °C    |              |
| Hopper Temperature          | 60 – 80        | °C    |              |
| Adapter Temperature         | 170 – 190      | °C    |              |
| Die Temperature             | 180 – 200      | °C    |              |
| Calibrator Temperature      | 60 – 100       | °C    |              |