



# LEXANT™ RESIN PU1230R

REGION EUROPE

## DESCRIPTION

LEXANT™ PU1230R resin is a 11 MFR polycarbonate, MVR of 12. UV stabilized. Medium viscosity. Designed for Automotive trim applications, excellent PUR coating adhesion.

## TYPICAL PROPERTY VALUES

Revision 20240425

| PROPERTIES                                  | TYPICAL VALUES | UNITS       | TEST METHODS   |
|---------------------------------------------|----------------|-------------|----------------|
| MECHANICAL                                  |                |             |                |
| Taber Abrasion, CS-17, 1 kg                 | 10             | mg / 1000cy | SABIC method   |
| Tensile Stress, yield, 50 mm/min            | 63             | MPa         | ISO 527        |
| Tensile Stress, break, 50 mm/min            | 70             | MPa         | ISO 527        |
| Tensile Strain, yield, 50 mm/min            | 6              | %           | ISO 527        |
| Tensile Strain, break, 50 mm/min            | 120            | %           | ISO 527        |
| Tensile Modulus, 1 mm/min                   | 2350           | MPa         | ISO 527        |
| Flexural Stress, yield, 2 mm/min            | 90             | MPa         | ISO 178        |
| Flexural Modulus, 2 mm/min                  | 2300           | MPa         | ISO 178        |
| Ball Indentation Hardness, H358/30          | 95             | MPa         | ISO 2039-1     |
| IMPACT                                      |                |             |                |
| Izod Impact, unnotched 80°10°3 +23°C        | NB             | kJ/m²       | ISO 180/1U     |
| Izod Impact, unnotched 80°10°3 -30°C        | NB             | kJ/m²       | ISO 180/1U     |
| Izod Impact, notched 80°10°3 +23°C          | 70             | kJ/m²       | ISO 180/1A     |
| Izod Impact, notched 80°10°3 -30°C          | 12             | kJ/m²       | ISO 180/1A     |
| Charpy 23°C, V-notch Edgew 80°10°3 sp=62mm  | 73             | kJ/m²       | ISO 179/1eA    |
| Charpy -30°C, V-notch Edgew 80°10°3 sp=62mm | 14             | kJ/m²       | ISO 179/1eA    |
| Charpy 23°C, Unnotch Edgew 80°10°3 sp=62mm  | NB             | kJ/m²       | ISO 179/1eU    |
| Charpy -30°C, Unnotch Edgew 80°10°3 sp=62mm | NB             | kJ/m²       | ISO 179/1eU    |
| THERMAL                                     |                |             |                |
| Thermal Conductivity                        | 0.2            | W/m.°C      | ISO 8302       |
| CTE, 23°C to 80°C, flow                     | 7.E-05         | 1/°C        | ISO 11359-2    |
| Ball Pressure Test, 125°C +/- 2°C           | PASSES         | -           | IEC 60695-10-2 |
| Vicat Softening Temp. Rate B/50             | 141            | °C          | ISO 306        |
| Vicat Softening Temp. Rate B/120            | 142            | °C          | ISO 306        |
| HDT/Be, 0.45MPa Edgew 120°10°4 sp=100mm     | 136            | °C          | ISO 75/Be      |
| HDT/Ae, 1.8 MPa Edgew 120°10°4 sp=100mm     | 125            | °C          | ISO 75/Ae      |
| PHYSICAL                                    |                |             |                |
| Mold Shrinkage on Tensile Bar, flow         | 0.5 – 0.7      | %           | SABIC method   |
| Density                                     | 1.2            | g/cm³       | ISO 1183       |
| Water Absorption, (23°C/saturated)          | 0.35           | %           | ISO 62-1       |
| Moisture Absorption (23°C / 50% RH)         | 0.15           | %           | ISO 62         |
| Melt Volume Rate, MVR at 300°C/1.2 kg       | 12             | cm³/ 10 min | ISO 1133       |
| OPTICAL                                     |                |             |                |
| Light Transmission, 2.54 mm                 | 88 – 90        | %           | ASTM D1003     |



| PROPERTIES                                    | TYPICAL VALUES | UNITS | TEST METHODS   |
|-----------------------------------------------|----------------|-------|----------------|
| Haze, 2.54 mm                                 | <0.8           | %     | ASTM D1003     |
| Refractive Index                              | 1.586          | -     | ISO 489        |
| ELECTRICAL                                    |                |       |                |
| Volume Resistivity                            | >1.E+15        | Ω.cm  | IEC 60093      |
| Surface Resistivity, ROA                      | >1.E+15        | Ω     | IEC 60093      |
| Dielectric Strength, in oil, 3.2 mm           | 17             | kV/mm | IEC 60243-1    |
| Relative Permittivity, 1 MHz                  | 2.7            | -     | IEC 60250      |
| Dissipation Factor, 50/60 Hz                  | 0.001          | -     | IEC 60250      |
| Dissipation Factor, 1 MHz                     | 0.01           | -     | IEC 60250      |
| Relative Permittivity, 50/60 Hz               | 2.7            | -     | IEC 60250      |
| FLAME CHARACTERISTICS                         |                |       |                |
| Glow Wire Flammability Index 850°C, passes at | 1              | mm    | IEC 60695-2-12 |
| Oxygen Index (LOI)                            | 25             | %     | ISO 4589       |
| INJECTION MOLDING                             |                |       |                |
| Drying Temperature                            | 120            | °C    |                |
| Drying Time                                   | 2 – 4          | Hrs   |                |
| Maximum Moisture Content                      | 0.02           | %     |                |
| Melt Temperature                              | 280 – 310      | °C    |                |
| Nozzle Temperature                            | 270 – 290      | °C    |                |
| Front - Zone 3 Temperature                    | 280 – 310      | °C    |                |
| Middle - Zone 2 Temperature                   | 270 – 290      | °C    |                |
| Rear - Zone 1 Temperature                     | 260 – 280      | °C    |                |
| Hopper Temperature                            | 60 – 80        | °C    |                |
| Mold Temperature                              | 80 – 110       | °C    |                |

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