# LEXAN™ Copolymer XHT3141 - Asia

PC | Saudi Basic Industries Corporation (SABIC)

## Product Texts

XHT3141 is a high flow, high heat polycarbonate copolymer. It is available in a range of opaque and limited transparent colors.

UL Yellow Card Link E207780-100052928

| Processing/Physical Characteristics | Value | Unit | Test Standard |
|---|---|---|---|
| **ISO Data** | | | |
| Melt volume-flow rate, MVR | **30** | cm³/10min | ISO 1133 |
| Temperature | **330** | °C | - |
| Load | **2.16** | kg | - |
| **ASTM Data** | | | |
| Melt Flow Index, MFI | **33** | g/10min | ASTM D 1238 |
| Temperature | **330** | °C | - |
| Load | **2.16** | kg | - |

| Mechanical properties | Value | Unit | Test Standard |
|---|---|---|---|
| **ISO Data** | | | |
| Tensile Modulus | **2500** | MPa | ISO 527 |
| Yield stress | **70** | MPa | ISO 527 |
| Yield strain | **6** | % | ISO 527 |
| Stress at break | **60** | MPa | ISO 527 |
| Strain at break | **50** | % | ISO 527 |
| Flexural modulus | **2500** | MPa | ISO 178 |
| Charpy impact strength, +23°C, 3mm | **N** | kJ/m² | ISO 179/1eU |
| Charpy impact strength, -30°C, 3mm | **N** | kJ/m² | ISO 179/1eU |
| Charpy notched impact strength, +23°C, 3mm | **11** | kJ/m² | ISO 179/1eA |
| Charpy notched impact strength, -30°C, 3mm | **9** | kJ/m² | ISO 179/1eA |
| Izod impact strength, +23°C | **N** | kJ/m² | ISO 180/1U |
| Izod notched impact strength, +23°C, 3mm | **9** | kJ/m² | ISO 180/1A |
| Izod notched impact strength, -30°C, 3mm | **9** | kJ/m² | ISO 180/1A |
| **ASTM Data** | | | |
| Tensile Modulus | **2700** | MPa | ASTM D 638 |
| Tensile Strength at Yield | **70** | MPa | ASTM D 638 |
| Tensile Strength at Break | **55** | MPa | ASTM D 638 |
| Elongation at Yield | **6** | % | ASTM D 638 |
| Elongation at Break | **70** | % | ASTM D 638 |
| Flexural Modulus | **2600** | MPa | ASTM D 790 |
| Izod Impact notched, 1/8 in | **97** | J/m | ASTM D 256 |
| Izod Impact notched, Low-Temperature | **55** | J/m | ASTM D 256 |
| Temperature | **-30** | °C | - |

| Thermal properties | Value | Unit | Test Standard |
|---|---|---|---|
| **ISO Data** | | | |
| Temp. of deflection under load, 1.80 MPa | **152** | °C | ISO 75-1/-2 |
| Temp. of deflection under load, 0.45 MPa | **164** | °C | ISO 75-1/-2 |
| Vicat softening temperature, B | **168** | °C | ISO 306 |
| Vicat softening temperature, 120°C/h 50N | **170** | °C | ISO 306 |
| Burning behav. at 1.5 mm nom. thickn. | **HB** | class | IEC 60695-11-10 |
| Thickness tested | **1.5** | mm | - |
| Glow Wire Flammability Index (GWFI) | **960** | °C | IEC 60695-2-12 |
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| Glow Wire Flammability Index (GWFI) | **960** | °C | IEC 60695-2-12 |
| GWIT - thickness tested (1) | **1** | mm | - |
| GWIT - thickness tested (2) | **2** | mm | - |
| Glow Wire Ignition Temperature (GWIT) | **875** | °C | IEC 60695-2-13 |
| GWIT - thickness tested (3) | **3** | mm | - |
| **ASTM Data** | | | |
| DTUL @ 66 psi | **166** | °C | ASTM D 648 |
| DTUL @ 264 psi | **156** | °C | ASTM D 648 |
| Vicat Temperature | **170** | °C | ASTM D 1525 |

| | | | |
|---|---|---|---|
| Thermal Conductivity, solid state | **0.0288** | W/(m K) | ASTM C 177 |

| **Electrical properties** | **Value** | **Unit** | **Test Standard** |
|---|---|---|---|
| **ASTM Data** | | | |
| Dielectric Strength, Short Time | **23** | kV/mm | ASTM D 149 |
| Dissipation Factor, 1 MHz | **0.011** | - | ASTM D 150 |
| Dielectric Constant, 1 MHz | **2.8** | - | ASTM D 150 |
| Surface Resistivity | **>1E15** | Ohm | ASTM D 257 |
| Volume Resistivity | **>1E15** | Ohm*cm | ASTM D 257 |

| **Other properties** | **Value** | **Unit** | **Test Standard** |
|---|---|---|---|
| Water absorption | **0.3** | % | Sim. to ISO 62 |
| Humidity absorption | **0.3** | % | Sim. to ISO 62 |
| Density | **1200** | kg/m³ | ISO 1183 |
| Density | **1200** | kg/m³ | ASTM D 792 |

| **Processing Recommendation Injection Molding** | **Value** | **Unit** | **Test Standard** |
|---|---|---|---|
| Pre-drying - Temperature | **135** | °C | - |
| Pre-drying - Time | **4 - 6** | h | - |
| Processing humidity | **≤0.02** | % | - |
| Melt temperature | **290 - 350** | °C | - |
| Mold temperature | **95 - 130** | °C | - |
| Zone 1 | **270 - 330** | °C | - |
| Zone 2 | **280 - 340** | °C | - |
| Zone 3 | **290 - 350** | °C | - |
| Screw speed | **40 - 90** | rpm | - |
| Back pressure | **0.3 - 0.7** | MPa | - |

**Characteristics**

**Processing**
Injection Molding

**Applications**
Automotive

**Special Characteristics**
Transparent

**Regional Availability**
Asia Pacific