

**Product Texts**

XHT3143 is a high flow, UV stabilized, high heat polycarbonate copolymer. It is available in a range of opaque and limited transparent colors.

UL Yellow Card Link [E207780-100321030](https://www.ul.com/yellow-card/E207780-100321030)

| Processing/Physical Characteristics | Value | Unit                   | Test Standard |
|-------------------------------------|-------|------------------------|---------------|
| <b>ISO Data</b>                     |       |                        |               |
| Melt volume-flow rate, MVR          | 30    | cm <sup>3</sup> /10min | ISO 1133      |
| Temperature                         | 330   | °C                     | -             |
| Load                                | 2.16  | kg                     | -             |
| <b>ASTM Data</b>                    |       |                        |               |
| Melt Flow Index, MFI                | 33    | g/10min                | ASTM D 1238   |
| Temperature                         | 330   | °C                     | -             |
| Load                                | 2.16  | kg                     | -             |

| Mechanical properties                      | Value | Unit              | Test Standard |
|--|-------|-------------------|---------------|
| <b>ISO Data</b>                            |       |                   |               |
| 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/m <sup>2</sup> | ISO 179/1eU   |
| Charpy impact strength, -30°C, 3mm         | N     | kJ/m <sup>2</sup> | ISO 179/1eU   |
| Charpy notched impact strength, +23°C, 3mm | 11    | kJ/m <sup>2</sup> | ISO 179/1eA   |
| Charpy notched impact strength, -30°C, 3mm | 9     | kJ/m <sup>2</sup> | ISO 179/1eA   |
| Izod impact strength, +23°C                | N     | kJ/m <sup>2</sup> | ISO 180/1U    |
| Izod notched impact strength, +23°C, 3mm   | 9     | kJ/m <sup>2</sup> | ISO 180/1A    |
| Izod notched impact strength, -30°C, 3mm   | 9     | kJ/m <sup>2</sup> | ISO 180/1A    |
| <b>ASTM Data</b>                           |       |                   |               |
| 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   |
|--|-------|-------|-----------------|
| <b>ISO Data</b>                          |       |       |                 |
| Temp. of deflection under load, 1.80 MPa | 152   | °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  |
| Glow Wire Ignition Temperature (GWIT)    | 875   | °C    | IEC 60695-2-13  |
| GWIT - thickness tested (3)              | 3     | mm    | -               |
| <b>ASTM Data</b>                         |       |       |                 |
| DTUL @ 66 psi                            | 166   | °C    | ASTM D 648      |
| DTUL @ 264 psi                           | 156   | °C    | ASTM D 648      |
| Vicat Temperature                        | 170   | °C    | ASTM D 1525     |

| Other properties | Value | Unit | Test Standard  |
|------------------|-------|------|----------------|
| Water absorption | 0.3   | %    | Sim. to ISO 62 |

|                     |             |                   |                |
|---------------------|-------------|-------------------|----------------|
| Humidity absorption | <b>0.3</b>  | %                 | Sim. to ISO 62 |
| Density             | <b>1200</b> | kg/m <sup>3</sup> | ISO 1183       |
| Density             | <b>1200</b> | kg/m <sup>3</sup> | ASTM D 792     |

| <b>Processing Recommendation Injection Molding</b> | <b>Value</b>     | <b>Unit</b> | <b>Test Standard</b> |
|--|------------------|-------------|----------------------|
| Pre-drying - Temperature                           | <b>135</b>       | °C          | -                    |
| Pre-drying - Time                                  | <b>4 - 6</b>     | h           | -                    |
| Processing humidity                                | <b>≤0.02</b>     | %           | -                    |
| Melt temperature                                   | <b>290 - 325</b> | °C          | -                    |
| Mold temperature                                   | <b>95 - 130</b>  | °C          | -                    |
| Zone 1   | <b>270 - 300</b> | °C          | -                    |
| Zone 2   | <b>280 - 310</b> | °C          | -                    |
| Zone 3   | <b>290 - 325</b> | °C          | -                    |
| Screw speed  | <b>40 - 90</b>   | rpm         | -                    |
| Back pressure                                      | <b>0.3 - 0.7</b> | MPa         | -                    |

**Characteristics****Processing**

Injection Molding

**Applications**

Automotive

**Special Characteristics**

Transparent

**Regional Availability**

Asia Pacific