

**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 [E121562-100052926](https://www.ul.com/yellowcard/E121562-100052926)

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
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. thckn.	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	-
<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

Thermal Conductivity, solid state	<b>0.0288</b>	W/(m K)	ASTM C 177
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Electrical properties	Value	Unit	Test Standard
<b>ASTM Data</b>			
Dielectric Strength, Short Time	<b>23</b>	kV/mm	ASTM D 149
Dissipation Factor, 1 MHz	<b>0.011</b>	-	ASTM D 150
Dielectric Constant, 1 MHz	<b>2.8</b>	-	ASTM D 150
Surface Resistivity	<b>&gt;1E15</b>	Ohm	ASTM D 257
Volume Resistivity	<b>&gt;1E15</b>	Ohm*cm	ASTM D 257

Other properties	Value	Unit	Test Standard
Water absorption	<b>0.3</b>	%	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

Processing Recommendation Injection Molding	Value	Unit	Test Standard
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 - 350</b>	°C	-
Mold temperature	<b>95 - 130</b>	°C	-
Zone 1	<b>270 - 330</b>	°C	-
Zone 2	<b>280 - 340</b>	°C	-
Zone 3	<b>290 - 350</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

North America