

**Product Texts**

XHT3171 is a 38 MVR high flow, high heat polycarbonate copolymer enabling high aesthetics, thin wall and complex designs. It is available in a range of opaque colors.

Processing/Physical Characteristics	Value	Unit	Test Standard
<b>ISO Data</b>			
Melt volume-flow rate, MVR	38	cm <sup>3</sup> /10min	ISO 1133
Temperature	330	°C	-
Load	2.16	kg	-
<b>ASTM Data</b>			
Melt Flow Index, MFI	42	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	75	MPa	ISO 527
Yield strain	7	%	ISO 527
Stress at break	60	MPa	ISO 527
Strain at break	50	%	ISO 527
Flexural modulus	2400	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	10	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
Rockwell hardness	R 125	-	ISO 2039-2
Ball indentation hardness	152	MPa	ISO 2039-1
<b>ASTM Data</b>			
Tensile Modulus	2500	MPa	ASTM D 638
Tensile Strength at Yield	75	MPa	ASTM D 638
Tensile Strength at Break	60	MPa	ASTM D 638
Elongation at Yield	7	%	ASTM D 638
Elongation at Break	30	%	ASTM D 638
Flexural Modulus	2700	MPa	ASTM D 790
Izod Impact notched, 1/8 in	80	J/m	ASTM D 256
Izod Impact notched, Low-Temperature	75	J/m	ASTM D 256
Temperature	-30	°C	-
Izod Impact unnotched, 1/8 in	N	J/m	ASTM D 256

Thermal properties	Value	Unit	Test Standard
<b>ISO Data</b>			
Temp. of deflection under load, 1.80 MPa	154	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	167	°C	ISO 75-1/-2
Vicat softening temperature, B	173	°C	ISO 306
Vicat softening temperature, 120°C/h 50N	175	°C	ISO 306
<b>ASTM Data</b>			
DTUL @ 66 psi	167	°C	ASTM D 648
DTUL @ 264 psi	154	°C	ASTM D 648
Vicat Temperature	172	°C	ASTM D 1525
Thermal Conductivity, solid state	0.0288	W/(m K)	ASTM C 177

Other properties	Value	Unit	Test Standard
Water absorption	0.35	%	Sim. to ISO 62
Humidity absorption	0.35	%	Sim. to ISO 62
Density	1200	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>130</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>85 - 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

**Regional Availability**

North America

**Applications**

Automotive