

Product Texts

XHT1171 is an 85 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
ISO Data			
Melt volume-flow rate, MVR	85	cm ³ /10min	ISO 1133
Temperature	330	°C	-
Load	2.16	kg	-
ASTM Data			
Melt Flow Index, MFI	90	g/10min	ASTM D 1238
Temperature	330	°C	-
Load	2.16	kg	-

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	2400	MPa	ISO 527
Yield stress	70	MPa	ISO 527
Yield strain	7	%	ISO 527
Stress at break	60	MPa	ISO 527
Strain at break	50	%	ISO 527
Flexural modulus	2350	MPa	ISO 178
Charpy impact strength, +23°C, 3mm	N	kJ/m ²	ISO 179/1eU
Charpy impact strength, -30°C, 3mm	N	kJ/m ²	ISO 179/1eU
Charpy notched impact strength, +23°C, 3mm	10	kJ/m ²	ISO 179/1eA
Charpy notched impact strength, -30°C, 3mm	10	kJ/m ²	ISO 179/1eA
Izod impact strength, +23°C	N	kJ/m ²	ISO 180/1U
Izod notched impact strength, +23°C, 3mm	9	kJ/m ²	ISO 180/1A
Izod notched impact strength, -30°C, 3mm	9	kJ/m ²	ISO 180/1A
Rockwell hardness	R 125	-	ISO 2039-2
Ball indentation hardness	145	MPa	ISO 2039-1
ASTM Data			
Tensile Modulus	2450	MPa	ASTM D 638
Tensile Strength at Yield	70	MPa	ASTM D 638
Tensile Strength at Break	60	MPa	ASTM D 638
Elongation at Yield	7	%	ASTM D 638
Elongation at Break	25	%	ASTM D 638
Flexural Modulus	2600	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
ISO Data			
Temp. of deflection under load, 1.80 MPa	138	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	150	°C	ISO 75-1/-2
Vicat softening temperature, B	155	°C	ISO 306
Vicat softening temperature, 120°C/h 50N	158	°C	ISO 306
ASTM Data			
DTUL @ 66 psi	150	°C	ASTM D 648
DTUL @ 264 psi	138	°C	ASTM D 648
Vicat Temperature	155	°C	ASTM D 1525
Thermal Conductivity, solid state	0.0288	W/(m K)	ASTM C 177

Other properties	Value	Unit	Test Standard
Water absorption	0.25	%	Sim. to ISO 62
Humidity absorption	0.25	%	Sim. to ISO 62
Density	1200	kg/m ³	ISO 1183

Density	1200	kg/m ³	ASTM D 792
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Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	130	°C	-
Pre-drying - Time	4 - 6	h	-
Processing humidity	≤0.02	%	-
Melt temperature	290 - 335	°C	-
Mold temperature	85 - 130	°C	-
Zone 1	270 - 315	°C	-
Zone 2	280 - 325	°C	-
Zone 3	290 - 335	°C	-
Screw speed	40 - 90	rpm	-
Back pressure	0.3 - 0.7	MPa	-

Characteristics

Processing

Injection Molding

Regional Availability

Asia Pacific

Applications

Automotive