

Product Texts

XHT5146 is a high flow, high heat polycarbonate copolymer with a haze onset of 185C. It is available in a range of opaque colors.

Processing/Physical Characteristics

	Value	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	15	cm ³ /10min	ISO 1133
Temperature	330	°C	-
Load	2.16	kg	-
ASTM Data			
Melt Flow Index, MFI	16	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	80	MPa	ISO 527
Yield strain	7	%	ISO 527
Stress at break	65	MPa	ISO 527
Strain at break	45	%	ISO 527
Flexural modulus	2550	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	11	kJ/m ²	ISO 179/1eA
Charpy notched impact strength, -30°C, 3mm	8	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	11	kJ/m ²	ISO 180/1A
Izod notched impact strength, -30°C, 3mm	8	kJ/m ²	ISO 180/1A
ASTM Data			
Tensile Modulus	2600	MPa	ASTM D 638
Tensile Strength at Yield	80	MPa	ASTM D 638
Tensile Strength at Break	65	MPa	ASTM D 638
Elongation at Yield	7.5	%	ASTM D 638
Elongation at Break	45	%	ASTM D 638
Flexural Modulus	2650	MPa	ASTM D 790
Izod Impact notched, 1/8 in	80	J/m	ASTM D 256
Izod Impact notched, Low-Temperature	35	J/m	ASTM D 256
Temperature	-30	°C	-

Thermal properties

	Value	Unit	Test Standard
ISO Data			
Temp. of deflection under load, 1.80 MPa	170	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	183	°C	ISO 75-1/-2
Vicat softening temperature, B	190	°C	ISO 306
Vicat softening temperature, 120°C/h 50N	190	°C	ISO 306
ASTM Data			
DTUL @ 66 psi	185	°C	ASTM D 648
DTUL @ 264 psi	174	°C	ASTM D 648
Vicat Temperature	190	°C	ASTM D 1525
Thermal Conductivity, solid state	0.0288	W/(m K)	ASTM C 177

Other properties

	Value	Unit	Test Standard
Water absorption	0.5	%	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

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	320 - 345	°C	-
Mold temperature	110 - 140	°C	-
Zone 1	300 - 325	°C	-
Zone 2	310 - 335	°C	-
Zone 3	320 - 345	°C	-
Screw speed	40 - 70	rpm	-
Back pressure	0.3 - 0.7	MPa	-

Characteristics**Processing**

Injection Molding

Regional Availability

North America