LEXAN™ Copolymer XHT2141 - Europe

PC — Saudi Basic Industries Corporation (SABIC)

Product Texts

XHT2141 is a high flow, high heat polycarbonate copolymer. It is available in a range of opaque and limited transparent colors.

UL Yellow Card Link E45329-100127669

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	**43**	cm³/10min	ISO 1133
Temperature	**330**	°C	-
Load	**2.16**	kg	-
ASTM Data			
Melt Flow Index, MFI	**46**	g/10min	ASTM D 1238
Temperature	**330**	°C	-
Load	**2.16**	kg	-

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	**2600**	MPa	ISO 527
Yield stress	**70**	MPa	ISO 527
Yield strain	**6.5**	%	ISO 527
Stress at break	**60**	MPa	ISO 527
Strain at break	**50**	%	ISO 527
Flexural modulus	**2450**	MPa	ISO 178
Charpy impact strength, +23°C, 3mm	**N**	kJ/m²	ISO 179/1eU
Charpy impact strength, -30°C, 3mm	**N**	kJ/m²	ISO 179/1eU
Charpy notched impact strength, +23°C, 3mm	**12**	kJ/m²	ISO 179/1eA
Charpy notched impact strength, -30°C, 3mm	**9**	kJ/m²	ISO 179/1eA
Izod impact strength, +23°C	**N**	kJ/m²	ISO 180/1U
Izod notched impact strength, +23°C, 4mm	**11**	kJ/m²	ISO 180/1A
Izod notched impact strength, -30°C, 4mm	**10**	kJ/m²	ISO 180/1A
Izod notched impact strength, +23°C, 3mm	**10**	kJ/m²	ISO 180/1A
Izod notched impact strength, -30°C, 3mm	**9**	kJ/m²	ISO 180/1A
ASTM Data			
Tensile Modulus	**2600**	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	**6.5**	%	ASTM D 638
Elongation at Break	**90**	%	ASTM D 638
Flexural Modulus	**2550**	MPa	ASTM D 790
Izod Impact notched, 1/8 in	**115**	J/m	ASTM D 256
Izod Impact notched, Low-Temperature	**75**	J/m	ASTM D 256
Temperature	**-30**	°C	-

Thermal properties	Value	Unit	Test Standard
ISO Data			
Temp. of deflection under load, 1.80 MPa	**142**	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	**155**	°C	ISO 75-1/-2
Vicat softening temperature, B	**160**	°C	ISO 306
Vicat softening temperature, 120°C/h 50N	**162**	°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
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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	-
ASTM Data			
DTUL @ 66 psi	**155**	°C	ASTM D 648

DTUL @ 264 psi	**145**	°C	ASTM D 648
Vicat Temperature	**161**	°C	ASTM D 1525
Thermal Conductivity, solid state	**0.0288**	W/(m K)	ASTM C 177

Electrical properties	**Value**	**Unit**	**Test Standard**
ASTM Data			
Dielectric Strength, Short Time	**22.6**	kV/mm	ASTM D 149
Dissipation Factor, 1 MHz	**3.1**	-	ASTM D 150
Surface Resistivity	**>1E15**	Ohm	ASTM D 257
Volume Resistivity	**>1E15**	Ohm*cm	ASTM D 257

Other properties	**Value**	**Unit**	**Test Standard**
Water absorption	**0.3**	%	Sim. to ISO 62
Humidity absorption	**0.23**	%	Sim. to ISO 62
Density	**1200**	kg/m³	ISO 1183
Density	**1200**	kg/m³	ASTM D 792

Processing Recommendation Injection Molding	**Value**	**Unit**	**Test Standard**
Pre-drying - Temperature	**125**	°C	-
Pre-drying - Time	**4 - 6**	h	-
Processing humidity	**≤0.02**	%	-
Melt temperature	**290 - 350**	°C	-
Mold temperature	**85 - 130**	°C	-
Zone 1	**270 - 330**	°C	-
Zone 2	**280 - 340**	°C	-
Zone 3	**290 - 350**	°C	-
Screw speed	**40 - 90**	rpm	-
Back pressure	**0.3 - 0.7**	MPa	-

Characteristics

Processing
Injection Molding

Applications
Automotive

Special Characteristics
Transparent

Regional Availability
Europe