

LEXAN™ COPOLYMER CXT19EX

REGION ASIA

DESCRIPTION

LEXAN™ CXT19EX resin is a High Heat Polycarbonate Copolymer Resin with Vicat of 190°C and crystal clear transparency. This resin is optimized for sheet and film extrusion applications, has a low plateout and a broad processing window with limited yellowing. It is available in limited transparent colors.

TYPICAL PROPERTY VALUES

Revision 20190103

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, yld, Type I, 50 mm/min	80	MPa	ASTM D 638
Tensile Stress, brk, Type I, 50 mm/min	65	MPa	ASTM D 638
Tensile Strain, yld, Type I, 50 mm/min	7.5	%	ASTM D 638
Tensile Strain, brk, Type I, 50 mm/min	>25	%	ASTM D 638
Tensile Modulus, 5 mm/min	2600	MPa	ASTM D 638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	120	MPa	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	2600	MPa	ASTM D 790
Tensile Stress, yield, 50 mm/min	80	MPa	ISO 527
Tensile Stress, break, 50 mm/min	65	MPa	ISO 527
Tensile Strain, yield, 50 mm/min	7.5	%	ISO 527
Tensile Strain, break, 50 mm/min	>25	%	ISO 527
Tensile Modulus, 1 mm/min	2500	MPa	ISO 527
Flexural Stress, yield, 2 mm/min	120	MPa	ISO 178
Flexural Modulus, 2 mm/min	2550	MPa	ISO 178
IMPACT			
Izod Impact, notched, 23°C	80	J/m	ASTM D 256
Izod Impact, notched, -30°C	70	J/m	ASTM D 256
Izod Impact, unnotched 80*10*3 +23°C	NB	kJ/m ²	ISO 180/1U
Izod Impact, notched 80*10*3 +23°C	8	kJ/m ²	ISO 180/1A
Izod Impact, notched 80*10*3 -30°C	6	kJ/m ²	ISO 180/1A
Charpy 23°C, V-notch Edgew 80*10*3 sp=62mm	9	kJ/m ²	ISO 179/1eA
Charpy -30°C, V-notch Edgew 80*10*3 sp=62mm	7	kJ/m ²	ISO 179/1eA
Charpy 23°C, Unnotch Edgew 80*10*3 sp=62mm	NB	kJ/m ²	ISO 179/1eU
THERMAL			
Tg (half width)	195	°C	SABIC method
Vicat Softening Temp, Rate B/120	192	°C	ASTM D 1525
HDT, 0.45 MPa, 3.2 mm, unannealed	187	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	172	°C	ASTM D 648
CTE, -40°C to 40°C, flow	6.00E-05	1/°C	ISO 11359-2
CTE, -40°C to 40°C, xflow	6.00E-05	1/°C	ISO 11359-2
Vicat Softening Temp, Rate B/120	192	°C	ISO 306
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	187	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	172	°C	ISO 75/Af
Thermal Conductivity	0.2	W/m·°C	ISO 8302

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
PHYSICAL			
Mold Shrinkage, flow, 3.2 mm	0.7 – 1.0	%	SABIC method
Mold Shrinkage, xflow, 3.2 mm	0.7 – 1.0	%	SABIC method
Specific Gravity	1.22	-	ASTM D 792
Melt Flow Rate, 330°C/2.16 kgf	15	g/10 min	ASTM D 1238
Density	1.22	g/cm ³	ISO 1183
Water Absorption, (23°C/sat)	0.5	%	ISO 62
Moisture Absorption (23°C / 50% RH)	0.3	%	ISO 62
Melt Volume Rate, MVR at 330°C/2.16kg	13	cm ³ /10 min	ISO 1133
OPTICAL			
Refractive Index	1.609	-	ISO 489
Abbe number	30	-	ISO 489
Light Transmission, 1.0 mm	89	%	ASTM D1003
Light Transmission at 2.0 mm	88	%	ASTM D1003
Light Transmission at 3.0 mm	87	%	ASTM D1003
MULTIWALL SHEET EXTRUSION			
Drying Temperature	135	°C	
Drying Time	4 – 6	hrs	
Barrel - Zone 1 Temperature	180 – 250	°C	
Barrel - Zone 2 Temperature	270 – 310	°C	
Barrel - Zone 3 Temperature	300 – 350	°C	
Hopper Temperature	100 – 150	°C	
Adapter Temperature	290 – 340	°C	
Die Temperature	290 – 355	°C	
Melt Temperature	290 – 355	°C	
Calibrator Temperature	100 – 170	°C	

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