

LEXAN™ COPOLYMER 4501

REGION EUROPE

DESCRIPTION

High heat resistant polyphthlate carbonate, provides DTUL of 290F at 264 psi.

TYPICAL PROPERTY VALUES

Revision 20170913

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, yield, 50 mm/min	65	MPa	ISO 527
Tensile Stress, break, 50 mm/min	55	MPa	ISO 527
Tensile Strain, yield, 50 mm/min	7	%	ISO 527
Tensile Strain, break, 50 mm/min	>50	%	ISO 527
Tensile Modulus, 1 mm/min	2300	MPa	ISO 527
Flexural Modulus, 2 mm/min	2300	MPa	ISO 178
Hardness, Rockwell R	122	-	ISO 2039-2
IMPACT			
Izod Impact, unnotched 80*10*3 +23°C	NB	kJ/m ²	ISO 180/1U
Izod Impact, unnotched 80*10*3 -30°C	NB	kJ/m ²	ISO 180/1U
Izod Impact, notched 80*10*3 +23°C	50	kJ/m ²	ISO 180/1A
Izod Impact, notched 80*10*3 -30°C	11	kJ/m ²	ISO 180/1A
Charpy 23°C, V-notch Edgew 80*10*3 sp=62mm	59	kJ/m ²	ISO 179/1eA
Charpy -30°C, V-notch Edgew 80*10*3 sp=62mm	13	kJ/m ²	ISO 179/1eA
Charpy 23°C, Unnotch Edgew 80*10*3 sp=62mm	NB	kJ/m ²	ISO 179/1eU
Charpy -30°C, Unnotch Edgew 80*10*3 sp=62mm	NB	kJ/m ²	ISO 179/1eU
THERMAL			
Thermal Conductivity	0.21	W/m-°C	ISO 8302
Ball Pressure Test, 125°C +/- 2°C	PASSES	-	IEC 60695-10-2
Vicat Softening Temp, Rate B/120	160	°C	ISO 306
PHYSICAL			
Mold Shrinkage on Tensile Bar, flow (2) (5)	0.7	%	SABIC method
Density	1.2	g/cm ³	ISO 1183
Melt Volume Rate, MVR at 300°C/5.0 kg	10	cm ³ /10 min	ISO 1133
ELECTRICAL			
Relative Permittivity, 1 MHz	3	-	IEC 60250
Dissipation Factor, 100 Hz	0.024	-	IEC 60250

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FLAME CHARACTERISTICS			
UL Compliant, 94V-2 Flame Class Rating (3)(4)	1.6	mm	UL 94 by SABIC-IP
INJECTION MOLDING			
Drying Temperature	125 – 135	°C	
Drying Time	3 – 4	hrs	
Melt Temperature	325 – 360	°C	
Nozzle Temperature	320 – 340	°C	
Front - Zone 3 Temperature	320 – 340	°C	
Middle - Zone 2 Temperature	310 – 330	°C	
Rear - Zone 1 Temperature	300 – 320	°C	
Hopper Temperature	60 – 80	°C	
Mold Temperature	100 – 125	°C	

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