

Revision 20200113

LEXAN[™] VISUALFX[™] RESIN FXD123R

REGION ASIA

DESCRIPTION

LEXAN FXD123R is a transparent/translucent low viscosity grade for light diffusion special effects. UV-stabilized. Color package may affect performance.

TYPICAL PROPERTY VALUES

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, yield	61	MPa	SABIC - Japan Method
Tensile Strain, break	220	%	SABIC - Japan Method
Flexural Stress	93	MPa	ASTM D 790
Flexural Modulus	2200	MPa	ASTM D 790
Hardness, Rockwell R	123	-	ASTM D 785
IMPACT			
Izod Impact, notched, 23°C	735	J/m	ASTM D 256
THERMAL			
HDT, 0.45 MPa, 3.2 mm, unannealed	130	°C	ASTM D 648
CTE, -30°C to 30°C	7.E-05	1/°C	TMA
Relative Temp Index, Elec ⁽¹⁾	130	°C	UL 746B
Relative Temp Index, Mech w/impact ⁽¹⁾	130	°C	UL 746B
Relative Temp Index, Mech w/o impact ⁽¹⁾	130	°C	UL 746B
PHYSICAL			
Specific Gravity	1.2	-	ASTM D 792
Water Absorption, 24 hours	0.15	%	ASTM D 570
Mold Shrinkage, flow, 3.2 mm	0.5 – 0.7	%	SABIC method
ELECTRICAL			
Surface Resistivity	1.E+16	Ohm	ASTM D 257
Relative Permittivity, 50/60 Hz	3.2	-	ASTM D 150
Comparative Tracking Index (UL) {PLC}	2	PLC Code	UL 746A
Hot-Wire Ignition (HWI), PLC 4	≥1.5	mm	UL 746A
High Amp Arc Ignition (HAI), PLC 1	≥3	mm	UL 746A
High Amp Arc Ignition (HAI), PLC 2	≥1.5	mm	UL 746A
High Voltage Arc Track Rate {PLC}	2	PLC Code	UL 746A
FLAME CHARACTERISTICS ⁽¹⁾			
UL Yellow Card Link	E207780-100791809	-	
UL Recognized, 94HB Flame Class Rating	≥0.75	mm	UL 94
UV-light, water exposure/immersion	F1	-	UL 746C
INJECTION MOLDING			
Drying Temperature	120	°C	
Drying Time	2 - 4	hrs	
Maximum Moisture Content	0.02	%	
Melt Temperature	280 - 300	°C	

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CHEMISTRY THAT MATTERS



PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Nozzle Temperature	270 – 290	°C	
Front - Zone 3 Temperature	280 – 300	°C	
Middle - Zone 2 Temperature	270 – 290	°C	
Rear - Zone 1 Temperature	260 – 280	°C	
Hopper Temperature	60 - 80	°C	
Mold Temperature	80 - 100	°C	

(1) UL Ratings shown on the technical datasheet might not cover the full range of thicknesses and colors. For details, please see the UL Yellow Card.

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