



LEXAN™ Resin FXE4271L

Asia Pacific: COMMERCIAL

LEXAN FXE4271L is a 10% glass filled, impact modified polycarbonate with excellent light-shield capability. It is designed for high flow, superior surface appearance, enhance release and good impact ductility. FXE4271L is available in white color only and ideal for light-shield applications.

TYPICAL PROPERTIES ¹	TYPICAL VALUE	Unit	Standard
MECHANICAL			
Tensile Stress, yld, Type I, 5 mm/min	480	kgf/cm ²	ASTM D 638
Tensile Stress, brk, Type I, 5 mm/min	370	kgf/cm ²	ASTM D 638
Tensile Strain, yld, Type I, 5 mm/min	4	%	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	11	%	ASTM D 638
Tensile Modulus, 5 mm/min	39200	kgf/cm ²	ASTM D 638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	880	kgf/cm ²	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	36700	kgf/cm ²	ASTM D 790
IMPACT			
Izod Impact, unnotched, 23°C	191	cm-kgf/cm	ASTM D 4812
Izod Impact, notched, 23°C	20	cm-kgf/cm	ASTM D 256
Instrumented Impact Total Energy, 23°C	367	cm-kgf	ASTM D 3763
THERMAL			
HDT, 0.45 MPa, 3.2 mm, unannealed	127	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	120	°C	ASTM D 648
Vicat Softening Temp, Rate B/120	132	°C	ISO 306
Relative Temp Index, Elec	80	°C	UL 746B
Relative Temp Index, Mech w/impact	80	°C	UL 746B
Relative Temp Index, Mech w/o impact	80	°C	UL 746B
PHYSICAL			
Specific Gravity	1.25	-	ASTM D 792
Mold Shrinkage, flow, 3.2 mm (5)	0.2 - 0.3	%	SABIC Method
Mold Shrinkage, xflow, 3.2 mm (5)	0.4 - 0.5	%	SABIC Method
Melt Flow Rate, 300°C/1.2 kgf	15	g/10 min	ASTM D 1238
Density	1.25	g/cm ³	ISO 1183



LEXAN™ Resin FXE4271L
Asia Pacific: COMMERCIAL

TYPICAL PROPERTIES ¹	TYPICAL VALUE	Unit	Standard
PHYSICAL			
Water Absorption, (23°C/sat)	0.13	%	ISO 62
Moisture Absorption (23°C / 50% RH)	0.04	%	ISO 62
Melt Volume Rate, MVR at 300°C/1.2 kg	14	cm ³ /10 min	ISO 1133
OPTICAL			
Light Transmission at 0.4 mm	< - 2.5	%	SABIC Method



LEXAN™ Resin FXE4271L
Asia Pacific: COMMERCIAL

PROCESSING PARAMETERS	TYPICAL VALUE	Unit
Injection Molding		
Drying Temperature	120	°C
Drying Time	3 - 4	hrs
Drying Time (Cumulative)	48	hrs
Maximum Moisture Content	0.02	%
Melt Temperature	290 - 310	°C
Nozzle Temperature	280 - 305	°C
Front - Zone 3 Temperature	290 - 310	°C
Middle - Zone 2 Temperature	275 - 300	°C
Rear - Zone 1 Temperature	265 - 290	°C
Mold Temperature	70 - 95	°C
Back Pressure	0.3 - 0.7	MPa
Screw Speed	40 - 70	rpm
Shot to Cylinder Size	40 - 60	%
Vent Depth	0.025 - 0.076	mm