

Product Texts

FXM123R is a LEXAN PC grade in Metallic or Pearlescent effects, part of the VisualFX family. These effects have been developed to meet increasing Aesthetic demands in the Marketplace. Color Package may affect properties, Application testing always recommended.

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	21	cm ³ /10min	ISO 1133
Temperature	300	°C	-
Load	1.2	kg	-
ASTM Data			
Melt Flow Index, MFI	18	g/10min	ASTM D 1238
Temperature	300	°C	-
Load	1.2	kg	-

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	2350	MPa	ISO 527
Yield stress	63	MPa	ISO 527
Yield strain	6	%	ISO 527
Stress at break	50	MPa	ISO 527
Strain at break	50	%	ISO 527
Flexural modulus, 23°C	2300	MPa	ISO 178
Charpy impact strength, +23°C	N	kJ/m ²	ISO 179/1eU
Charpy impact strength, -30°C	N	kJ/m ²	ISO 179/1eU
Charpy notched impact strength, +23°C	10	kJ/m ²	ISO 179/1eA
Charpy notched impact strength, -30°C	8	kJ/m ²	ISO 179/1eA
Izod impact strength, +23°C	N	kJ/m ²	ISO 180/1U
Izod notched impact strength, +23°C	10	kJ/m ²	ISO 180/1A
Izod notched impact strength	8	kJ/m ²	ISO 180/1A
Temperature	-30	°C	-
ASTM Data			
Tensile Modulus	2360	MPa	ASTM D 638
Tensile Strength at Yield	62	MPa	ASTM D 638
Tensile Strength at Break	49	MPa	ASTM D 638
Elongation at Yield	6	%	ASTM D 638
Elongation at Break	70	%	ASTM D 638
Flexural Modulus	2380	MPa	ASTM D 790
Izod Impact notched, 1/8 in	214	J/m	ASTM D 256
Izod Impact unnotched, 1/8 in	N	J/m	ASTM D 256

Thermal properties	Value	Unit	Test Standard
ISO Data			
Temp. of deflection under load, 1.80 MPa	122	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	133	°C	ISO 75-1/-2
Vicat softening temperature, B	140	°C	ISO 306
Coeff. of linear therm. expansion, parallel	70	E-6/K	ISO 11359-1/-2
Coeff. of linear therm. expansion, normal	70	E-6/K	ISO 11359-1/-2
ASTM Data			
Coefficient of Thermal Expansion, MD	70	E-6/K	ASTM D 696
Coefficient of Thermal Expansion, TD	70	E-6/K	ASTM D 696
DTUL @ 66 psi	132	°C	ASTM D 648
DTUL @ 264 psi	121	°C	ASTM D 648
Vicat Temperature	154	°C	ASTM D 1525

Other properties	Value	Unit	Test Standard
Water absorption	0.35	%	Sim. to ISO 62
Humidity absorption	0.15	%	Sim. to ISO 62
Density	1200	kg/m ³	ISO 1183

Density	1200	kg/m ³	ASTM D 792
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Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	120	°C	-
Pre-drying - Time	3 - 4	h	-
Processing humidity	≤0.02	%	-
Melt temperature	280 - 305	°C	-
Mold temperature	70 - 95	°C	-
Zone 1	260 - 280	°C	-
Zone 2	270 - 295	°C	-
Zone 3	280 - 305	°C	-
Nozzle temperature	275 - 300	°C	-
Screw speed	40 - 70	rpm	-
Back pressure	0.3 - 0.7	MPa	-

Characteristics

Processing

Injection Molding

Applications

Automotive, Building Construction

Features

Metallic effect

Regional Availability

Asia Pacific