LNP™ ELCRES™ FXD9111T

DESCRIPTION

LNP ELCRES FXD9111T is a PC-Siloxane copolymer resin with light diffusion special effects, which is part of the VISUALFX product family. Color package may affect performance. Added features of this grade include: Transparent/translucent, non-chlorinated, non-brominated flame retardant. FR V0 at 2mm.

GENERAL INFORMATION	
Features	Aesthetics/Visual effects, Transparent/Translucent, Non Cl/Br flame retardant, No PFAS intentionally added
Fillers	Unreinforced
Polymer Types	Polycarbonate (PC)
Processing Techniques	Injection Molding

INDUSTRY	SUB INDUSTRY
Consumer	Home Appliances, Commercial Appliance
Electrical and Electronics	Mobile Phone - Computer - Tablets, Lighting
Industrial	Electrical

TYPICAL PROPERTY VALUES

Revision 20260204

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL [1]			
Tensile Stress, yld, Type I, 50 mm/min	59	MPa	ASTM D638
Tensile Stress, brk, Type I, 50 mm/min	57	MPa	ASTM D638
Tensile Strain, yld, Type I, 50 mm/min	6	%	ASTM D638
Tensile Strain, brk, Type I, 50 mm/min	97	%	ASTM D638
Tensile Modulus, 50 mm/min	2318	MPa	ASTM D638
Flexural Stress at 5% strain, 1.3 mm/min, 50 mm span	88	MPa	ASTM D790
Flexural Strength, 1.3 mm/min, 50 mm span	94	MPa	ASTM D790
Flexural Modulus, 1.3 mm/min, 50 mm span	2230	MPa	ASTM D790
Tensile Stress, yield, 50 mm/min	58	MPa	ISO 527
Tensile Stress, break, 50 mm/min	51	MPa	ISO 527
Tensile Strain, yield, 50 mm/min	5	%	ISO 527
Tensile Strain, break, 50 mm/min	71	%	ISO 527
Tensile Modulus, 1 mm/min	2297	MPa	ISO 527
Flexural Stress at 3.5% strain, 2 mm/min	86.3	MPa	ISO 178
Flexural Strain, break, 2 mm/min	7.6	%	ISO 178
Flexural Strength, 2 mm/min	87.9	MPa	ISO 178
Flexural Modulus, 2 mm/min	2085	MPa	ISO 178
IMPACT [1]			
Izod Impact, notched, 23°C	643	J/m	ASTM D256
Izod Impact, unnotched, 23°C	2140	J/m	ASTM D4812
Izod Impact, notched 80*10*4 +23°C	52	kJ/m²	ISO 180/1A
Izod Impact, unnotched 80*10*4 +23°C	182	kJ/m²	ISO 180/1U

© 2026 Copyright by SABIC. All rights reserved

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Charpy 23°C, V-notch Edgew 80*10*4 sp=62mm	55	kJ/m²	ISO 179/1eA
Charpy 23°C, Unnotch Edgew 80*10*4 sp=62mm	131	kJ/m²	ISO 179/1eU
THERMAL [1]			
HDT, 0.45 MPa, 3.2 mm, unannealed	119	°C	ASTM D648
HDT, 1.82 MPa, 3.2mm, unannealed	109	°C	ASTM D648
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	118	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	106	°C	ISO 75/Af
CTE, -40°C to 95°C, flow	7.9E-05	1/°C	ASTM E831
CTE, -40°C to 95°C, xflow	8.5E-05	1/°C	ASTM E831
CTE, 23°C to 80°C, flow	8.2E-05	1/°C	ISO 11359-2
CTE, 23°C to 80°C, xflow	8.6E-05	1/°C	ISO 11359-2
Vicat Softening Temp, Rate A/50	131	°C	ASTM D1525
Vicat Softening Temp, Rate B/120	125	°C	ASTM D1525
Vicat Softening Temp, Rate B/50	124	°C	ISO 306
Vicat Softening Temp, Rate B/120	125	°C	ISO 306
Relative Temp Index, Elec [2]	80	°C	UL 746B
Relative Temp Index, Mech w/impact [2]	80	°C	UL 746B
Relative Temp Index, Mech w/o impact [2]	80	°C	UL 746B
PHYSICAL [1]			
Specific Gravity	1.2	-	ASTM D792
Density	1.197	g/cm³	ISO 1183
Water Absorption, (23°C/24hrs)	0.1	%	ISO 62-1
Moisture Absorption, (23°C/50% RH/24hrs)	0.03	%	ISO 62-4
Melt Flow Rate, 300°C/1.2 kgf	19.4	g/10 min	ASTM D1238
Melt Volume Rate, MVR at 300°C/1.2 kg	18.4	cm³/10 min	ASTM D1238
Mold Shrinkage, flow [3]	0.63	%	SABIC method
Mold Shrinkage, xflow [3]	0.69	%	SABIC method
FLAME CHARACTERISTICS [2]			
UL Yellow Card Link	E207780-104604292	-	-
UL Recognized, 94V-0 Flame Class Rating	≥2	mm	UL 94
INJECTION MOLDING [4]			
Drying Temperature	90	°C	
Drying Time	3 – 4	Hrs	
Maximum Moisture Content	0.02	%	
Melt Temperature	250 – 285	°C	
Nozzle Temperature	250 – 285	°C	
Front - Zone 3 Temperature	250 – 285	°C	
Middle - Zone 2 Temperature	250 – 285	°C	
Rear - Zone 1 Temperature	250 – 285	°C	
Mold Temperature	59 – 90	°C	

© 2026 Copyright by SABIC. All rights reserved

(1) The information stated on Technical Datasheets should be used as indicative only for material selection purposes and not be utilized as specification or used for part or tool design.

(2) 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.

(3) Measurements made from laboratory test coupon. Actual shrinkage may vary outside of range due to differences in processing conditions, equipment, part geometry and tool design. It is recommended that mold shrinkage studies be performed with surrogate or legacy tooling prior to cutting tools for new molded article.

(4) Injection Molding parameters are only mentioned as general guidelines. These may not apply or may need adjustment in specific situations such as low shot sizes, large part molding, thin wall molding and gas-assist molding.

DISCLAIMER

Any sale by SABIC, its subsidiaries and affiliates (each a “seller”), is made exclusively under seller’s standard conditions of sale (available upon request) unless agreed otherwise in writing and signed on behalf of the seller. While the information contained herein is given in good faith, SELLER MAKES NO WARRANTY, EXPRESS OR IMPLIED, INCLUDING MERCHANTABILITY AND NONINFRINGEMENT OF INTELLECTUAL PROPERTY, NOR ASSUMES ANY LIABILITY, DIRECT OR INDIRECT, WITH RESPECT TO THE PERFORMANCE, SUITABILITY OR FITNESS FOR INTENDED USE OR PURPOSE OF THESE PRODUCTS IN ANY APPLICATION. Each customer must determine the suitability of seller materials for the customer’s particular use through appropriate testing and analysis. No statement by seller concerning a possible use of any product, service or design is intended, or should be construed, to grant any license under any patent or other intellectual property right.

© 2026 Copyright by SABIC. All rights reserved