LNP™ ELCRIN™ DMX1234RCC

DESCRIPTION

ELCRIN DMX1234RCC is an improved scratch resistant polycarbonate copolymer that contains 25% Post consumer recycle content. This standard flow, UV stabilized, custom colorable resin is an excellent candidate for wide variety of electronics, consumer, and industrial applications that require improved scratch resistance.

GENERAL INFORMATION	
Features	Impact resistant, Weatherable/UV stable, No PFAS intentionally added (PCR contains <50ppm total organic fluorine content)
Fillers	Unreinforced
Brands	LNP™ ELCRIN™
Polymer Types	Polycarbonate (PC)
Processing Techniques	Injection Molding

INDUSTRY	SUB INDUSTRY
Automotive	Automotive Interiors
Consumer	Sport/Leisure, Personal Accessory, Home Appliances, Commercial Appliance
Electrical and Electronics	Electrical Devices and Displays, Electrical Components and Infrastructure

TYPICAL PROPERTY VALUES

Revision 20250606

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL [1]			
Tensile Stress, yield, 50 mm/min	77	MPa	ISO 527
Tensile Stress, break, 50 mm/min	61	MPa	ISO 527
Tensile Strain, yield, 50 mm/min	7	%	ISO 527
Tensile Strain, break, 50 mm/min	92	%	ISO 527
Tensile Modulus, 1 mm/min	2474	MPa	ISO 527
Flexural Modulus, 2 mm/min	2503	MPa	ISO 178
Flexural Stress, yield, 2 mm/min	108	MPa	ISO 178
Tensile Modulus, 50 mm/min	2630	MPa	ASTM D638
Tensile Strain, brk, Type I, 50 mm/min	80	%	ASTM D638
Tensile Strain, yld, Type I, 50 mm/min	8	%	ASTM D638
Tensile Stress, brk, Type I, 50 mm/min	63	MPa	ASTM D638
Tensile Stress, yld, Type I, 50 mm/min	78	MPa	ASTM D638
Flexural Modulus, 1.3 mm/min, 50 mm span	2490	MPa	ASTM D790
Flexural Stress, yld, 1.3 mm/min, 50 mm span	121	MPa	ASTM D790
Pencil Hardness test, 0.5 kgf	F	-	ASTM D3363
Hardness, Rockwell M	89	-	ASTM D785
IMPACT [1]			
Izod Impact, notched 80*10*3 +23°C	3	kJ/m²	ISO 180/1A
Izod Impact, notched 80*10*3 -30°C	20	kJ/m²	ISO 180/1A
Izod Impact, unnotched 80*10*3 +23°C	169	kJ/m²	ISO 180/1U

© 2026 Copyright by SABIC. All rights reserved

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Izod Impact, unnotched 80*10*3 -30°C	87	kJ/m²	ISO 180/1U
Charpy 23°C, V-notch Edgew 80*10*3 sp=62mm	2	kJ/m²	ISO 179/1eA
Charpy -30°C, V-notch Edgew 80*10*3 sp=62mm	1	kJ/m²	ISO 179/1eA
Charpy 23°C, Unnotch Edgew 80*10*3 sp=62mm	324	kJ/m²	ISO 179/1eU
Charpy -30°C, Unnotch Edgew 80*10*3 sp=62mm	93	kJ/m²	ISO 179/1eU
Izod Impact, notched, 23°C	30	J/m	ASTM D256
Izod Impact, notched, 0°C	32	J/m	ASTM D256
Izod Impact, notched, -30°C	31	J/m	ASTM D256
Izod Impact, unnotched, 23°C	NB	J/m	ASTM D4812
Izod Impact, unnotched, -30°C	1440	J/m	ASTM D4812
Instrumented Dart Impact Total Energy, 23°C	39	J	ASTM D3763
THERMAL [1]			
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	118	°C	ISO 75/Af
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	132	°C	ISO 75/Bf
HDT, 1.82 MPa, 3.2mm, unannealed	120	°C	ASTM D648
HDT, 0.45 MPa, 3.2 mm, unannealed	133	°C	ASTM D648
Vicat Softening Temp, Rate B/50	138	°C	ISO 306
Vicat Softening Temp, Rate B/120	140	°C	ISO 306
Vicat Softening Temp, Rate B/50	138	°C	ASTM D1525
Vicat Softening Temp, Rate B/120	140	°C	ASTM D1525
CTE, -40°C to 40°C, flow	6.8E-05	1/°C	ISO 11359-2
CTE, -40°C to 40°C, xflow	7.0E-05	1/°C	ISO 11359-2
CTE, -40°C to 40°C, flow	6.8E-05	1/°C	ASTM E831
CTE, -40°C to 40°C, xflow	7.0E-05	1/°C	ASTM E831
PHYSICAL [1]			
Density	1.18	g/cm³	ISO 1183
Moisture Absorption, (23°C/50% RH/24 hrs)	0.04	%	ASTM D570
Water Absorption, (23°C/24hrs)	0.09	%	ASTM D570
Specific Gravity	1.18	-	ASTM D792
Mold Shrinkage, flow, 24 hrs	0.5 – 0.8	%	ASTM D955
Mold Shrinkage, xflow, 24 hrs	0.5 – 0.8	%	ASTM D955
Melt Volume Rate, MVR at 300°C/1.2 kg	14	cm³/10 min	ISO 1133
Melt Flow Rate, 300°C/1.2 kgf	16	g/10 min	ASTM D1238
Melt Volume Rate, MVR at 300°C/1.2 kg	14	cm³/10 min	ASTM D1238
INJECTION MOLDING [2]			
Drying Temperature	120	°C	
Drying Time	3 – 4	Hrs	
Maximum Moisture Content	0.02	%	
Melt Temperature	295 – 315	°C	
Rear - Zone 1 Temperature	260 – 280	°C	
Middle - Zone 2 Temperature	280 – 305	°C	
Front - Zone 3 Temperature	295 – 315	°C	
Nozzle Temperature	290 – 310	°C	
Mold Temperature	70 – 95	°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) 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