LNP™ ELCRIN™ RCX7236

DESCRIPTION

RCX7236 is an impact modified Polycarbonate (PC) containing 60% PCR content with non-brominated and non-chlorinated FR intended for thin-wall applications requiring excellent impact/flow balance performance. It's available for custom color matching.

GENERAL INFORMATION	
Features	High Flow, Thin Wall, Non Cl/Br flame retardant, Impact resistant
Fillers	Unreinforced
Polymer Types	Polycarbonate (PC)
Processing Techniques	Injection Molding
Regional Availability	Global

TYPICAL PROPERTY VALUES

Revision 20241213

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL [1]			
Tensile Modulus, 50 mm/min	2500	MPa	ASTM D638
Tensile Strain, brk, Type I, 50 mm/min	100	%	ASTM D638
Tensile Strain, yld, Type I, 50 mm/min	5	%	ASTM D638
Tensile Stress, brk, Type I, 50 mm/min	55	MPa	ASTM D638
Tensile Stress, yld, Type I, 50 mm/min	65	MPa	ASTM D638
Flexural Modulus, 1.3 mm/min, 50 mm span	2500	MPa	ASTM D790
Flexural Stress, yld, 1.3 mm/min, 50 mm span	100	MPa	ASTM D790
IMPACT [1]			
Izod Impact, notched 80*10*4 +23°C	38	kJ/m²	ISO 180/1A
Izod Impact, notched, 23°C	650	J/m	ASTM D256
Izod Impact, notched, -30°C	120	J/m	ASTM D256
Instrumented Dart Impact Total Energy, 23°C	61	J	ASTM D3763
THERMAL [1]			
HDT, 1.82 MPa, 3.2mm, unannealed	90	°C	ASTM D648
HDT, 0.45 MPa, 3.2 mm, unannealed	101	°C	ASTM D648
Vicat Softening Temp, Rate B/50	107	°C	ASTM D1525
CTE, -40°C to 40°C, flow	7.5E-05	1/°C	ASTM E831
CTE, -40°C to 40°C, xflow	7.5E-05	1/°C	ASTM E831
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 [1]			
Water Absorption, (23°C/saturated)	0.12	%	ISO 62-1
Specific Gravity	1.19	-	ASTM D792
Mold Shrinkage, flow [2]	0.4 – 0.6	%	SABIC method
Melt Flow Rate, 260°C/2.16 kgf	18	g/10 min	ASTM D1238
FLAME CHARACTERISTICS [3]			

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
UL Recognized, 94V-0 Flame Class Rating	≥1.0	mm	UL 94
Glow Wire Ignitability Temperature, 3.0 mm	750	°C	IEC 60695-2-13
Glow Wire Flammability Index, 3.0 mm	960	°C	IEC 60695-2-12
UL Yellow Card Link	UL Yellow Card	-	-
INJECTION MOLDING [4]			
Drying Temperature	80 – 90	°C	
Drying Time	2 – 4	Hrs	
Maximum Moisture Content	.02	%	
Hopper Temperature	60 – 80	°C	
Melt Temperature	250 – 300	°C	
Rear - Zone 1 Temperature	230 – 280	°C	
Middle - Zone 2 Temperature	240 – 290	°C	
Front - Zone 3 Temperature	250 – 300	°C	
Nozzle Temperature	250 – 300	°C	
Mold Temperature	60 – 85	°C	

(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) 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. 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.

(3) 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.

(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