

LNPT[™] ELCRIN[™] DF0023RCC

DESCRIPTION

LNPT[™] ELCRIN[™] DF0023RCC compound is based on recycled Polycarbonate (PC) resin containing 10% glass fiber. Added features of this grade include: Good Ductility, Good Processability, Non-Brominated & Non-Chlorinated Flame Retardant, Light-blocking at 0.5 mm. Post-Consumer Recycling (PCR) Polycarbonate content up to 50%. UL94 V2 at 0.3 mm and V0 at 1.5 mm.

TYPICAL PROPERTY VALUES

Revision 20260312

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, yield, 5 mm/min	52	MPa	ISO 527
Tensile Stress, break, 5 mm/min	38	MPa	ISO 527
Tensile Strain, yield, 5 mm/min	4	%	ISO 527
Tensile Strain, break, 5 mm/min	9	%	ISO 527
Tensile Modulus, 1 mm/min	4000	MPa	ISO 527
Tensile Modulus, 5 mm/min	4000	MPa	ASTM D638
Tensile Strain, brk, Type I, 5 mm/min	10	%	ASTM D638
Tensile Strain, yld, Type I, 5 mm/min	4	%	ASTM D638
Tensile Stress, brk, Type I, 5 mm/min	39	MPa	ASTM D638
Tensile Stress, yld, Type I, 5 mm/min	52	MPa	ASTM D638
Flexural Modulus, 1.3 mm/min, 50 mm span	3400	MPa	ASTM D790
Flexural Stress, yld, 1.3 mm/min, 50 mm span	92	MPa	ASTM D790
Flexural Stress, brk, 1.3 mm/min, 50 mm span	91	MPa	ASTM D790
IMPACT			
Izod Impact, notched 80*10*4 +23°C	17	kJ/m ²	ISO 180/1A
Izod Impact, unnotched 80*10*4 +23°C	110	kJ/m ²	ISO 180/1U
Charpy 23°C, V-notch Edgew 80*10*4 sp=62mm	18	kJ/m ²	ISO 179/1eA
Charpy 23°C, Unnotch Edgew 80*10*4 sp=62mm	123	kJ/m ²	ISO 179/1eU
Izod Impact, notched, 23°C	220	J/m	ASTM D256
Izod Impact, unnotched, 23°C	1600	J/m	ASTM D4812
Instrumented Dart Impact Total Energy, 23°C	75	J	ASTM D3763
Instrumented Dart Impact Energy @ peak, 23°C	17	J	ASTM D3763
Instrumented Dart Impact Peak Force, 23°C	1.6	N	ASTM D3763
THERMAL			
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	113	°C	ISO 75/Af
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	118	°C	ISO 75/Bf
HDT, 1.82 MPa, 3.2mm, unannealed	115	°C	ASTM D648
HDT, 0.45 MPa, 3.2 mm, unannealed	121	°C	ASTM D648
Vicat Softening Temp, Rate B/ 120	121	°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			
Density	1.27	g/cm ³	ISO 1183

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Mold Shrinkage, flow	0.3 – 0.5	%	SABIC method
Mold Shrinkage, xflow	0.3 – 0.5	%	SABIC method
Melt Volume Rate, MVR at 300°C/1.2 kg	10	cm³/10 min	ISO 1133
Specific Gravity	1.28	-	ASTM D792
FLAME CHARACTERISTICS			
UL Recognized, 94V-2 Flame Class Rating	0.3	mm	UL 94
UL Recognized, 94V-0 Flame Class Rating	1.5	mm	UL 94
UL Yellow Card Link	ER017400 (BK17)(WT4), DF0023RCC (BK17)(WT4) UL Product iQ (ulprospector.com)		-
INJECTION MOLDING			
Drying Temperature	110	°C	
Drying Time	3 – 4	Hrs	
Maximum Moisture Content	0.02	%	
Melt Temperature	285 – 310	°C	
Rear - Zone 1 Temperature	260 – 280	°C	
Middle - Zone 2 Temperature	270 – 290	°C	
Front - Zone 3 Temperature	280 – 300	°C	
Nozzle Temperature	285 – 305	°C	
Mold Temperature	80 – 110	°C	

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