LNP™ ELCRES™ CRX1414

DESCRIPTION

LNP ELCRES CRX1414 is an amorphous PC copolymer resin that offers medium flow, high ductility in combination with excellent chemical resistance. CRX1414 is available for custom coloring and may be an excellent candidate for a wide variety of applications that need improved chemical resistance.

TYPICAL PROPERTY VALUES

Revision 20200211

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, yld, Type I, 50 mm/min	54	MPa	ASTM D 638
Tensile Strain, yld, Type I, 50 mm/min	6	%	ASTM D 638
Tensile Strain, brk, Type I, 50 mm/min	>100	%	ASTM D 638
Tensile Modulus, 50 mm/min	2020	MPa	ASTM D 638
Flexural Modulus, 1.3 mm/min, 50 mm span	2170	MPa	ASTM D 790
Flexural Strength, 1.3 mm/min, 50 mm span	90	MPa	ASTM D 790
IMPACT			
Izod Impact, notched, 23°C	875	J/m	ASTM D 256
Izod Impact, notched, -30°C	777	J/m	ASTM D 256
THERMAL			
HDT, 1.82 MPa, 3.2mm, unannealed	125	°C	ASTM D 648
HDT, 0.45 MPa, 3.2 mm, unannealed	138	°C	ASTM D 648
Vicat Softening Temp, Rate B/50	143	°C	ASTM D 1525
Vicat Softening Temp, Rate B/120	146	°C	ASTM D 1525
PHYSICAL			
Specific Gravity	1.2	-	ASTM D 792
Mold Shrinkage, flow	0.6 – 1	%	SABIC method
Mold Shrinkage, xflow	0.6 – 1	%	SABIC method
Melt Volume Rate, MVR at 300°C/1.2 kg	9.5	cm³/10 min	ASTM D 1238
Melt Flow Rate, 300°C/1.2 kgf	10	g/10 min	ASTM D 1238
FLAME CHARACTERISTICS [1]			
UL Compliant, 94HB Flame Class Rating	≥0.75	mm	UL 94 by SABIC-IP
INJECTION MOLDING			
Drying Temperature	120	°C	
Drying Time	3 – 4	hrs	
Drying Time (Cumulative)	12	hrs	
Maximum Moisture Content	0.02	%	
Melt Temperature	290 – 340	°C	
Rear - Zone 1 Temperature	270 – 320	°C	
Middle - Zone 2 Temperature	280 – 330	°C	
Front - Zone 3 Temperature	290 – 340	°C	
Nozzle Temperature	290 – 340	°C	
Mold Temperature	80 – 110	°C	
Back Pressure	0.3 – 0.7	MPa	
Screw Speed	50 – 100	rpm	

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Shot to Cylinder Size	40 – 80	%	
Vent Depth	0.025 – 0.076	mm	

(1) UL rating shown here is based on internal measurements.

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