LNP™ ELCRES™ CRX5421

DESCRIPTION

LNP ELCRES CRX5421 is semi-crystalline PC copolymer/PBT opaque blend. This resin offers medium flow, high ductility in combination with excellent chemical resistance. CRX5421 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	42	MPa	ASTM D 638
Tensile Strain, yld, Type I, 50 mm/min	4	%	ASTM D 638
Tensile Strain, brk, Type I, 50 mm/min	70	%	ASTM D 638
Tensile Modulus, 50 mm/min	1820	MPa	ASTM D 638
Flexural Modulus, 1.3 mm/min, 50 mm span	1980	MPa	ASTM D 790
Flexural Strength, 1.3 mm/min, 50 mm span	68	MPa	ASTM D 790
Tensile Stress, yield, 50 mm/min	42	MPa	ISO 527
Tensile Strain, yield, 50 mm/min	4	%	ISO 527
Tensile Strain, break, 50 mm/min	70	%	ISO 527
Tensile Modulus, 1 mm/min	1850	MPa	ISO 527
IMPACT			
Izod Impact, notched, 23°C	645	J/m	ASTM D 256
Izod Impact, notched, -30°C	180	J/m	ASTM D 256
Instrumented Impact Total Energy, 23°C	60	J	ASTM D 3763
Instrumented Impact Energy @ peak, 23°C	34	J	ASTM D 3763
THERMAL			
HDT, 1.82 MPa, 3.2mm, unannealed	64	°C	ASTM D 648
HDT, 0.45 MPa, 3.2 mm, unannealed	123	°C	ASTM D 648
Vicat Softening Temp, Rate B/50	129	°C	ASTM D 1525
Vicat Softening Temp, Rate B/120	136	°C	ASTM D 1525
PHYSICAL			
Mold Shrinkage, flow	1.2 – 1.8	%	SABIC method
Mold Shrinkage, xflow	1.2 – 1.8	%	SABIC method
Melt Volume Rate, MVR at 250°C/5 kg	10	cm³/10 min	ASTM D 1238
Melt Flow Rate, 250°C/5.0 kgf	11	g/10 min	ASTM D 1238
FLAME CHARACTERISTICS			
UL Compliant, 94HB Flame Class Rating (1)	≥1.5	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	250 – 265	°C	
Rear - Zone 1 Temperature	240 – 255	°C	

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PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Middle - Zone 2 Temperature	245 – 260	°C	
Front - Zone 3 Temperature	250 – 265	°C	
Nozzle Temperature	250 – 265	°C	
Mold Temperature	75 – 95	°C	
Back Pressure	0.3 – 0.7	MPa	
Screw Speed	50 – 100	rpm	
Shot to Cylinder Size	40 – 80	%	
Vent Depth	0.025 – 0.038	mm	

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

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