

LNPT[™] ELCREST[™] SR8338

DESCRIPTION

LNP ELCREST SR8338 is a compound based on Polycarbonate/ABS/PMMA resin. Added feature of this material are: High Strength, Good Processability, Enhanced Scratch resistance.

GENERAL INFORMATION	
Features	Good Processability, Scratch Resistance, High stiffness/Strength
Fillers	Unreinforced
Polymer Types	Polycarbonate (PC), Acrylic, Polymethyl Methacrylate (Acrylic (PMMA)), Acrylonitrile Butadiene Styrene (ABS)
Processing Techniques	Injection Molding

INDUSTRY	SUB INDUSTRY
Automotive	Automotive EV, Automotive Interiors
Consumer	Personal Accessory, Home Appliances
Industrial	Material Handling

TYPICAL PROPERTY VALUES

Revision 20231109

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL ⁽¹⁾			
Tensile Stress, yld, Type I, 50 mm/min	56	MPa	ASTM D638
Tensile Stress, brk, Type I, 50 mm/min	52	MPa	ASTM D638
Tensile Strain, yld, Type I, 50 mm/min	5	%	ASTM D638
Tensile Strain, brk, Type I, 50 mm/min	>48	%	ASTM D638
Tensile Modulus, 5 mm/min	2410	MPa	ASTM D638
Flexural Strength, 1.3 mm/min, 50 mm span	86	MPa	ASTM D790
Flexural Modulus, 1.3 mm/min, 50 mm span	2320	MPa	ASTM D790
Tensile Stress, yield, 50 mm/min	56	MPa	ISO 527
Tensile Stress, break, 50 mm/min	52	MPa	ISO 527
Tensile Strain, yield, 50 mm/min	5	%	ISO 527
Tensile Strain, break, 50 mm/min	>48	%	ISO 527
Tensile Modulus, 1 mm/min	2410	MPa	ISO 527
Flexural Strength, 2 mm/min	86	MPa	ISO 178
Flexural Modulus, 2 mm/min	2320	MPa	ISO 178
IMPACT ⁽¹⁾			
Izod Impact, notched, 23°C	560	J/m	ASTM D256
Izod Impact, notched, -30°C	310	J/m	ASTM D256
Izod Impact, double-gated, 23°C	152	J/m	SABIC method
Izod Impact, notched 80*10*3 +23°C	52	kJ/m ²	ISO 180/1A
Izod Impact, notched 80*10*3 -30°C	21	kJ/m ²	ISO 180/1A
Charpy 23°C, V-notch Edgew 80*10*3 sp=62mm	52	kJ/m ²	ISO 179/1eA
Charpy -30°C, V-notch Edgew 80*10*3 sp=62mm	20	kJ/m ²	ISO 179/1eA

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Instrumented Dart Impact Total Energy, 23°C	65	J	ASTM D3763
THERMAL ⁽¹⁾			
HDT, 0.45 MPa, 3.2 mm, unannealed	121	°C	ASTM D648
HDT, 1.82 MPa, 3.2mm, unannealed	108	°C	ASTM D648
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	108	°C	ISO 75/Af
CTE, -40°C to 40°C, flow	7.E-05	1/°C	ASTM E831
CTE, -40°C to 40°C, xflow	7.E-05	1/°C	ASTM E831
CTE, -40°C to 40°C, flow	7.E-05	1/°C	ISO 11359-2
CTE, -40°C to 40°C, xflow	7.E-05	1/°C	ISO 11359-2
Vicat Softening Temp, Rate B/50	130	°C	ASTM D1525
Vicat Softening Temp, Rate B/50	130	°C	ISO 306
Vicat Softening Temp, Rate B/120	132	°C	ISO 306
Relative Temp Index, Elec ⁽²⁾	80	°C	UL 746B
Relative Temp Index, Mech w/impact ⁽²⁾	80	°C	UL 746B
Relative Temp Index, Mech w/o impact ⁽²⁾	80	°C	UL 746B
PHYSICAL ⁽¹⁾			
Specific Gravity	1.15	-	ASTM D792
Density	1.15	g/cm ³	ISO 1183
Water Absorption, (23°C/saturated)	0.4	%	ISO 62-1
Moisture Absorption (23°C / 50% RH)	0.1	%	ISO 62
Melt Flow Rate, 260°C/5.0 kgf	18	g/10 min	ASTM D1238
Melt Volume Rate, MVR at 260°C/5.0 kg	17	cm ³ /10 min	ISO 1133
Mold Shrinkage, flow, 3.2 mm	0.4 – 0.6	%	SABIC method
FLAME CHARACTERISTICS ⁽²⁾			
UL Yellow Card Link	E207780-104558979	-	-
UL Recognized, 94HB Flame Class Rating	≥0.8	mm	UL 94
INJECTION MOLDING ⁽³⁾			
Drying Temperature	100 – 110	°C	
Drying Time	2 – 4	Hrs	
Maximum Moisture Content	0.02	%	
Melt Temperature	260 – 290	°C	
Nozzle Temperature	240 – 280	°C	
Front - Zone 3 Temperature	250 – 290	°C	
Middle - Zone 2 Temperature	250 – 290	°C	
Rear - Zone 1 Temperature	230 – 260	°C	
Hopper Temperature	60 – 80	°C	
Mold Temperature	60 – 90	°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) 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.

(3) 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.



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