

# LNPT<sup>TM</sup> ELCREST<sup>TM</sup> SR8338

## DESCRIPTION

LNP ELCRES 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 |
|-------------------------------------------|----------------|-------|--------------|
| <b>MECHANICAL <sup>(1)</sup></b>          |                |       |              |
| 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</ |              |

| PROPERTIES                                          | TYPICAL VALUES | UNITS             | TEST METHODS |
|-----------------------------------------------------|----------------|-------------------|--------------|
| Instrumented Dart Impact Total Energy, 23°C         | 65             | J                 | ASTM D3763   |
| <b>THERMAL <sup>(1)</sup></b>                       |                |                   |              |
| 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 <sup>(2)</sup>            | 80             | °C                | UL 746B      |
| Relative Temp Index, Mech w/impact <sup>(2)</sup>   | 80             | °C                | UL 746B      |
| Relative Temp Index, Mech w/o impact <sup>(2)</sup> | 80             | °C                | UL 746B      |
| <b>PHYSICAL <sup>(1)</sup></b>                      |                |                   |              |
| Specific Gravity                                    | 1.15           | -                 | ASTM D792    |
| Density                                             | 1.15           | g/cm <sup>3</sup> | ISO 1183     |
| Water Absorption, (23°C/saturated)                  | 0.4            | %                 | ISO 62-1     |
| Moisture Absorption (23°C / 50                      |                |                   |              |



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