# LNP™ COLORCOMP™ COMPOUND J1000AE

J-1000 EM

## DESCRIPTION

LNP COLORCOMP J1000AE is an unfilled Polyethersulfone. Added feature of this grade is: Easy Molding.

## TYPICAL PROPERTY VALUES

Revision 20200109

| PROPERTIES | TYPICAL VALUES | UNITS | TEST METHODS |
|---|---|---|---|
| MECHANICAL | | | |
| Tensile Stress, brk, Type I, 5 mm/min | 88 | MPa | ASTM D 638 |
| Tensile Strain, yld, Type I, 5 mm/min | 6.5 | % | ASTM D 638 |
| Tensile Modulus, 50 mm/min | 2690 | MPa | ASTM D 638 |
| Flexural Stress, brk, 1.3 mm/min, 50 mm span | 125 | MPa | ASTM D 790 |
| Flexural Modulus, 1.3 mm/min, 50 mm span | 2620 | MPa | ASTM D 790 |
| IMPACT | | | |
| Izod Impact, notched, 23°C | 53 | J/m | ASTM D 256 |
| THERMAL | | | |
| HDT, 1.82 MPa, 3.2mm, unannealed | 200 | °C | ASTM D 648 |
| CTE, -30°C to 30°C, flow | 5.2E-05 | 1/°C | ASTM D 696 |
| Relative Temp Index, Elec [1] | 180 | °C | UL 746B |
| Relative Temp Index, Mech w/impact [1] | 170 | °C | UL 746B |
| Relative Temp Index, Mech w/o impact [1] | 180 | °C | UL 746B |
| PHYSICAL | | | |
| Specific Gravity | 1.37 | - | ASTM D 792 |
| Moisture Absorption, 50% RH, 24 hrs | 0.5 | % | ASTM D 570 |
| Mold Shrinkage, flow, 24 hrs | 0.6 | % | ASTM D 955 |
| ELECTRICAL | | | |
| Volume Resistivity | 1.75E+15 | Ohm-cm | ASTM D 257 |
| Dissipation Factor, 50/60 Hz | 0.0017 | - | ASTM D 150 |
| Dissipation Factor, 1 kHz | 0.0022 | - | ASTM D 150 |
| Dissipation Factor, 1 MHz | 0.0056 | - | ASTM D 150 |
| Hot-Wire Ignition (HWI), PLC 3 | ≥0.81 | mm | UL 746A |
| Hot-Wire Ignition (HWI), PLC 4 | ≥0.43 | mm | UL 746A |
| High Amp Arc Ignition (HAI), PLC 0 | ≥0.43 | mm | UL 746A |
| High Amp Arc Ignition (HAI), PLC 1 | ≥0.81 | mm | UL 746A |
| FLAME CHARACTERISTICS [1] | | | |
| UL Yellow Card Link | E121562-101283890 | - | - |
| UL Recognized, 94V-0 Flame Class Rating | ≥0.81 | mm | UL 94 |
| UL Recognized, 94V-2 Flame Class Rating | ≥0.43 | mm | UL 94 |
| INJECTION MOLDING | | | |
| Drying Temperature | 120 – 150 | °C | |
| Drying Time | 4 | hrs | |
| Maximum Moisture Content | 0.05 | % | |

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| PROPERTIES | TYPICAL VALUES | UNITS | TEST METHODS |
|---|---|---|---|
| Melt Temperature | 355 – 370 | °C | |
| Front - Zone 3 Temperature | 370 – 380 | °C | |
| Middle - Zone 2 Temperature | 360 – 370 | °C | |
| Rear - Zone 1 Temperature | 345 – 355 | °C | |
| Mold Temperature | 140 – 150 | °C | |
| Back Pressure | 0.3 – 0.7 | MPa | |
| Screw Speed | 60 – 100 | rpm | |

(1) 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.

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