

LNPTM COLORCOMPTM COMPOUND DX05471-GN8A091

DESCRIPTION

LNP COLORCOMP DX05471-GN8A091 compound is based on Polycarbonate (PC) resin. Added features of this grade include Glow-In-The-Dark.

| GENERAL INFORMATION | | |
|-----------------------|--|--|
| Features | Aesthetics/Visual effects, No PFAS intentionally added | |
| Fillers | Unreinforced | |
| Polymer Types | Polycarbonate (PC) | |
| Processing Techniques | Injection Molding | |

| INDUSTRY | SUB INDUSTRY |
|------------|----------------------------------|
| Automotive | Automotive Interiors |
| Consumer | Home Decoration, Sport / Leisure |

TYPICAL PROPERTY VALUES

Revision 20240426

| PROPERTIES | TYPICAL VALUES | UNITS | TEST METHODS |
|--|----------------|-------|--------------|
| MECHANICAL (1) | | | |
| Tensile Stress, yld, Type I, 50 mm/min | 62 | MPa | ASTM D638 |
| Tensile Stress, brk, Type I, 50 mm/min | 68 | MPa | ASTM D638 |
| Tensile Strain, yld, Type I, 50 mm/min | 7 | % | ASTM D638 |
| Tensile Strain, brk, Type I, 50 mm/min | 130 | % | ASTM D638 |
| Flexural Stress, yld, 1.3 mm/min, 50 mm span | 96 | MPa | ASTM D790 |
| Flexural Modulus, 1.3 mm/min, 50 mm span | 2340 | MPa | ASTM D790 |
| Hardness, Rockwell M | 70 | - | ASTM D785 |
| Hardness, Rockwell R | 118 | - | ASTM D785 |
| IMPACT (1) | | | |
| Izod Impact, unnotched, 23°C | 3204 | J/m | ASTM D4812 |
| Izod Impact, notched, 23°C | 801 | J/m | ASTM D256 |
| Tensile Impact Strength, Type S | 577 | kJ/m² | ASTM D1822 |
| THERMAL (1) | | | |
| HDT, 0.45 MPa, 6.4 mm, unannealed | 137 | °C | ASTM D648 |
| HDT, 1.82 MPa, 6.4 mm, unannealed | 132 | °C | ASTM D648 |
| CTE, -40°C to 95°C, flow | 6.84E-05 | 1/°C | ASTM E831 |
| PHYSICAL (1) | | | |
| Specific Gravity | 1.2 | - | ASTM D792 |
| Water Absorption, (23°C/24hrs) | 0.15 | % | ASTM D570 |
| Water Absorption, (23°C/Saturated) | 0.35 | % | ASTM D570 |
| Water Absorption, equilibrium, 100°C | 0.58 | % | ASTM D570 |



| PROPERTIES | TYPICAL VALUES | UNITS | TEST METHODS |
|----------------------------------|----------------|----------|--------------|
| Mold Shrinkage, flow, 3.2 mm (2) | 0.5 – 0.7 | % | SABIC method |
| Melt Flow Rate, 300°C/1.2 kgf | 10.5 | g/10 min | ASTM D1238 |
| INJECTION MOLDING (3) | | | |
| Drying Temperature | 120 | °C | |
| Drying Time | 3 – 4 | Hrs | |
| Drying Time (Cumulative) | 48 | Hrs | |
| Maximum Moisture Content | 0.02 | % | |
| Melt Temperature | 295 – 315 | °C | |
| Nozzle Temperature | 290 – 310 | °C | |
| Front - Zone 3 Temperature | 295 – 315 | °C | |
| Middle - Zone 2 Temperature | 280 – 305 | °C | |
| Rear - Zone 1 Temperature | 270 – 295 | °C | |
| Mold Temperature | 70 – 95 | °C | |
| Back Pressure | 0.3 – 0.7 | MPa | |
| Screw Speed | 40 – 70 | rpm | |
| Shot to Cylinder Size | 40 – 60 | % | |
| Vent Depth | 0.025 – 0.076 | mm | |

- (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) Measurements made from laboratory test coupon. Actual shrinkage may vary outside of range due to differences in processing conditions, equipment, part geometry and tool design. It is recommended that mold shrinkage studies be performed with surrogate or legacy tooling prior to cutting tools for new molded article.
- (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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