

Product Information

TRIEX[®] 3025PJ Polycarbonate Resin



TRIREX 3025PJ GRADE

DESCRIPTION

- TRIREX is the registered trademark of polycarbonate resin manufactured by Samyang Corporation. TRIREX polycarbonate resins offer superior mechanical properties, good dimensional stability and high electrical performance, which allows it to be widely used for electrical, electronic, appliance, automotive and optical industries.
- TRIREX 3025PJ is a polycarbonate resin grade which has high low temperature impact strength in combination with superior mechanical and physical property.

CHARACTERISTICS

- Granule type
- Superior low temperature impact resistance
- Good flow-ability
- Workable under a wide range of temperatures (-100 °C ~ 135 °C)
- High electrical performance
- Good dimensional stability
- Low moisture absorbency
- Good weather resistance

APPLICATIONS

- TRIREX 3025PJ resin grade is designed for compounding.
- Medium viscosity. Transparent colors only.

TYPICAL DATA OF TRIEX 3025PJ GRADE



| PROPERTY | UNIT | ASTM METHOD | TYPICAL DATA |
|--|----------------------------------|-------------|------------------------|
| PHYSICAL | | | |
| Specific Gravity | - | D792 | 1.20 |
| Water Absorption (24 hours at 23°C) | % | D570 | 0.15 |
| Melt Flow Rate (300°C, 1.2kg) | g/10min | D1238 | 9 |
| MECHANICAL | | | |
| Tensile Strength at yield | kg _f /cm ² | D638 | 730 |
| Tensile Elongation at break | % | D638 | 150 |
| Flexural Strength at yield | kg _f /cm ² | D790 | 940 |
| Flexural Modulus | kg _f /cm ² | D790 | 23,000 |
| Izod Impact Strength, notched, 23°C (1/8") | kg _f ·cm/cm | D256 | 95 |
| Rockwell Hardness | R scale | D785 | |
| THERMAL | | | |
| HDT, 18.6 kg _f /cm ² | °C | D648 | 134 |
| Coefficient of Linear Thermal Expansion | mm/mm/°C | D696 | 5~7 x 10 ⁻⁵ |
| ELECTRICAL | | | |
| Volume Resistivity | Ω·cm | D257 | 4 x 10 ¹⁶ |
| Dielectric Strength | kV/mm | D149 | 30 |
| Dielectric Constant | - | D150 | |
| Dissipation Factor | - | D150 | |
| ARC Resistance | sec | D495 | 120 |
| OTHERS | | | |
| UL-94 Flammability (1/16" thickness) | - | (UL 94) | V-2 |
| Mold Shrinkage (3mm thickness) | % | D955 | 0.5~0.7 |

※ The figures listed in this table are typical values obtained under the standard test methods and may not be applicable for products that are under different application condition.

PROCESSING GUIDE FOR TRIEX 3025PJ GRADE



- General processing conditions for TRIEX 3025PJ are shown below. Drying prior to processing is essential to ensure desired appearance and property performance.

| SPECIFICATION | UNIT | CONDITIONS |
|-----------------------|------|-------------|
| Drying Temperature | °C | 120 |
| Drying Time | hr | 3 ~ 5 |
| Moisture Content, Max | % | 0.02 |
| Melt Temperature | °C | 275 ~ 310 |
| Nozzle Temperature | °C | 275 ~ 310 |
| Front Temperature | °C | 275 ~ 300 |
| Middle Temperature | °C | 260 ~ 285 |
| Rear Temperature | °C | 245 ~ 270 |
| Mold Temperature | °C | 65 ~ 105 |
| Back Pressure | MPa | 0.25 ~ 0.7 |
| Screw Speed | rpm | 40 ~ 70 |
| Vent Depth | mm | 0.02 ~ 0.08 |

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