TRIREX® 3025IR(H)

Polycarbonate

Samyang Corporation

Message:

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 3025IR(H) is a polycarbonate resin grade which has high low temperature impact strength in combination with superior mechanical and physical property. CHARACTERISTICS

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 3025IR(02) resin grade is used for electric and electronic applications, food contact materials and etc. Medium viscosity. Transparent colors only.

| General Information | | | | |
|--|------------------------------------|----------|-------------|--|
| Features | Food Contact Acceptable | | | |
| | Good Dimensional Stability | | | |
| | Good Electrical Properties | | | |
| | Good Flow | | | |
| | Good Weather Resistance | | | |
| | Low Moisture Absorption | | | |
| | Low Temperature Impact Resistance | | | |
| | Medium Viscosity | | | |
| | | | | |
| Uses | Appliances | | | |
| | Automotive Applications | | | |
| | Electrical/Electronic Applications | | | |
| | Non-specific Food Applications | | | |
| | Optical Applications | | | |
| | | | | |
| Appearance | Clear/Transparent | | | |
| Forms | Pellets | | | |
| Processing Method | Injection Molding | | | |
| Physical | Nominal Value | Unit | Test Method | |
| Specific Gravity | 1.20 | g/cm³ | ASTM D792 | |
| Melt Mass-Flow Rate (MFR) (300°C/1.2 kg) | 10 | g/10 min | ASTM D1238 | |
| Molding Shrinkage - Flow (3.00 mm) | 0.50 to 0.70 | % | ASTM D955 | |

| Water Absorption (23°C, 24 hr) | 0.15 | % | ASTM D570 |
|--|------------------|----------|-------------|
| Mechanical | Nominal Value | Unit | Test Method |
| Tensile Strength (Yield) | 70.0 | MPa | ASTM D638 |
| Tensile Elongation (Break) | 120 | % | ASTM D638 |
| Flexural Modulus | 2060 | MPa | ASTM D790 |
| Flexural Strength (Yield) | 86.0 | MPa | ASTM D790 |
| Impact | Nominal Value | Unit | Test Method |
| Notched Izod Impact (23°C, 3.18 mm) | 880 | J/m | ASTM D256 |
| Thermal | Nominal Value | Unit | Test Method |
| Deflection Temperature Under Load (1.8 MPa, Unannealed) | 135 | °C | ASTM D648 |
| CLTE - Flow | 5.0E-5 to 7.0E-5 | cm/cm/°C | ASTM D696 |
| Electrical | Nominal Value | Unit | Test Method |
| Volume Resistivity | 4.0E+16 | ohms•cm | ASTM D257 |
| Dielectric Strength | 30 | kV/mm | ASTM D149 |
| Arc Resistance | 120 | sec | ASTM D495 |
| Flammability | Nominal Value | Unit | Test Method |
| Flame Rating (1.59 mm) | V-2 | | UL 94 |
| Injection | Nominal Value | Unit | |
| Drying Temperature | 120 | °C | |
| Drying Time | 3.0 to 5.0 | hr | |
| Suggested Max Moisture | 0.020 | % | |
| Rear Temperature | 245 to 270 | °C | |
| Middle Temperature | 260 to 285 | °C | |
| Front Temperature | 275 to 300 | °C | |
| Nozzle Temperature | 275 to 310 | °C | |
| Processing (Melt) Temp | 275 to 310 | °C | |
| Mold Temperature | 65.0 to 105 | °C | |
| Back Pressure | 0.250 to 0.700 | MPa | |
| Screw Speed | 40 to 70 | rpm | |
| Vent Depth | 0.020 to 0.080 | mm | |
| | | | |

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection. All rights belong to the original authors. If any infringement occurs, please contact us immediately.

Recommended distributors for this material

Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519 Phone: +86 13424755533 Email: sales@su-jiao.com No. 215, Lianhe North Road, Fengxian District, Shanghai, China

