# TRIREX® 3020U(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 3020U(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 3020U(H) resin grade is used for Injection molding products. UV stabilized.
Low viscosity. Transparent colors only.

| General Information | |
|---|---|
| Additive | UV Stabilizer |
| Features | Good Dimensional Stability<br>Good Electrical Properties<br>Good Flow<br>Good UV Resistance<br>Good Weather Resistance<br>Low Moisture Absorption<br>Low Temperature Impact Resistance<br>Low Viscosity |
| Uses | Appliances<br>Automotive Applications<br>Electrical/Electronic Applications<br>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) | 23 | g/10 min | ASTM D1238 |
| Water Absorption (23°C, 24 hr) | 0.15 | % | ASTM D570 |

| Mechanical | Nominal Value | Unit | Test Method |
|---|---|---|---|
| Tensile Strength (Yield) | 64.0 | MPa | ASTM D638 |
| Tensile Elongation (Break) | 90 | % | ASTM D638 |
| Flexural Modulus | 1960 | 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) | 740 | J/m | ASTM D256 |
| **Thermal** | **Nominal Value** | **Unit** | **Test Method** |
| Deflection Temperature Under Load (1.8 MPa, Unannealed) | 130 | °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 |
| **Optical** | **Nominal Value** | **Unit** | **Test Method** |
| Haze | 0.40 | % | ASTM D1003 |
| **Injection** | **Nominal Value** | **Unit** | |
| Drying Temperature | 120 | °C | |
| Drying Time | 3.0 to 5.0 | hr | |
| Suggested Max Moisture | 0.020 | % | |
| Rear Temperature | 235 to 260 | °C | |
| Middle Temperature | 250 to 275 | °C | |
| Front Temperature | 265 to 290 | °C | |
| Nozzle Temperature | 265 to 300 | °C | |
| Processing (Melt) Temp | 265 to 300 | °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 | |



## 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


WECHAT