

## TECHNICAL DATASHEET

**TRIEX<sup>®</sup> ST2-3022U**

PC

| PROPERTY                                   | UNIT                             | ASTM METHOD | TYPICAL DATA           |
|--------------------------------------------|----------------------------------|-------------|------------------------|
| <b>PHYSICAL</b>                            |                                  |             |                        |
| Specific Gravity                           | -                                | D792        | 1.19                   |
| Water Absorption (24 hours at 23°C)        | %                                | D570        | 0.15                   |
| Melt Flow Rate (300°C, 1.2kg)              | g/10min                          | D1238       | 15                     |
| <b>MECHANICAL</b>                          |                                  |             |                        |
| Tensile Strength at yield                  | kg <sub>f</sub> /cm <sup>2</sup> | D638        | 600                    |
| Tensile Elongation at break                | %                                | D638        | 160                    |
| Flexural Strength at yield                 | kg <sub>f</sub> /cm <sup>2</sup> | D790        | 900                    |
| Flexural Modulus                           | kg <sub>f</sub> /cm <sup>2</sup> | D790        | 20,000                 |
| Izod Impact Strength, notched, 23°C (1/8") | kg <sub>f</sub> ·cm/cm           | D256        | 80                     |
| Rockwell Hardness                          | R scale                          | D785        | 120                    |
| <b>THERMAL</b>                             |                                  |             |                        |
| HDT, 18.6 kgf/cm <sup>2</sup>              | °C                               | D648        | 130                    |
| Coefficient of Linear Thermal Expansion    | mm/mm/°C                         | D696        | 5.6 x 10 <sup>-5</sup> |
| <b>ELECTRICAL</b>                          |                                  |             |                        |
| Volume Resistivity                         | Ω·cm                             | D257        | 4E+16                  |
| Dielectric Strength                        | kV/mm                            | D149        | 30                     |
| Dielectric Constant                        | -                                | D150        | 2.85                   |
| Dissipation Factor                         | -                                | D150        | 0.0092                 |
| ARC Resistance                             | sec                              | D495        | 120                    |
| <b>OTHERS</b>                              |                                  |             |                        |
| 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

# TRIREX<sup>®</sup> ST2-3022U GRADE

PC

- General processing conditions for TRIREXST2-3022U are shown below. Drying prior to processing is essential to ensure desired appearance and property performance.

| SPECIFICATION         | UNIT | CONDITIONS  |
|-----------------------|------|-------------|
| Drying Temperature    | ℃    | 120         |
| Drying Time           | hr   | 3-5         |
| Moisture Content, Max | %    | 0.02        |
| Melt Temperature      | ℃    | 290~310     |
| Nozzle Temperature    | ℃    | 280~315     |
| Front Temperature     | ℃    | 290~315     |
| Middle Temperature    | ℃    | 275~300     |
| Rear Temperature      | ℃    | 260~280     |
| Mold Temperature      | ℃    | 65~105      |
| Back Pressure         | MPa  | 0.3~0.7     |
| Screw Speed           | rpm  | 50~70       |
| Vent Depth            | mm   | 0.025~0.076 |

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