

## Samyang Trirex® 3025A Polycarbonate

Category : Polymer , Thermoplastic , Polycarbonate (PC) , Polycarbonate, Molded

### Material Notes:

TRIEX® polycarbonate resins offer superior transparency, mechanical properties, good dimensional stability and high electrical performance, which allows it to be widely used for electrical, electronic, appliance, automotive and optical industries. Characteristics: Medium viscosity Natural type Applications: Injection molding for general purpose uses All information provided by Samyang

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_Samyang-Trirex-3025A-Polycarbonate.php](http://www.lookpolymers.com/polymer_Samyang-Trirex-3025A-Polycarbonate.php)

| Physical Properties   | Metric                                              | English                                             | Comments   |
|-----------------------|-----------------------------------------------------|-----------------------------------------------------|------------|
| Specific Gravity      | 1.20 g/cc                                           | 1.20 g/cc                                           | ASTM D792  |
| Water Absorption      | 0.15 %<br>@Time 86400 sec                           | 0.15 %<br>@Time 24.0 hour                           | ASTM D570  |
| Linear Mold Shrinkage | 0.0050 - 0.0070 cm/cm<br>@Thickness 3.00 mm         | 0.0050 - 0.0070 in/in<br>@Thickness 0.118 in        | ASTM D955  |
| Melt Flow             | 10 g/10 min<br>@Load 1.20 kg,<br>Temperature 300 °C | 10 g/10 min<br>@Load 2.65 lb,<br>Temperature 572 °F | ASTM D1238 |

| Mechanical Properties   | Metric                          | English                              | Comments  |
|-------------------------|---------------------------------|--------------------------------------|-----------|
| Hardness, Rockwell R    | 120                             | 120                                  | ASTM D785 |
| Tensile Strength, Yield | 69.6 MPa                        | 10100 psi                            | ASTM D638 |
| Elongation at Break     | 120 %                           | 120 %                                | ASTM D638 |
| Flexural Yield Strength | 86.3 MPa                        | 12500 psi                            | ASTM D790 |
| Flexural Modulus        | 2.06 GPa                        | 299 ksi                              | ASTM D790 |
| Izod Impact, Unnotched  | 8.83 J/cm<br>@Thickness 3.17 mm | 16.5 ft-lb/in<br>@Thickness 0.125 in | ASTM D256 |

| Thermal Properties                          | Metric       | English        | Comments  |
|---------------------------------------------|--------------|----------------|-----------|
| CTE, linear                                 | 56.0 µm/m-°C | 31.1 µin/in-°F | ASTM D696 |
| Deflection Temperature at 0.46 MPa (66 psi) | 146 °C       | 295 °F         | ASTM D648 |
| Deflection Temperature at 1.8 MPa (264 psi) | 135 °C       | 275 °F         | ASTM D648 |

| Thermal Properties | Metric             | English              | Comments |
|--------------------|--------------------|----------------------|----------|
| Flammability, UL94 | @Thickness 1.59 mm | @Thickness 0.0625 in |          |

| Electrical Properties | Metric                | English               | Comments  |
|-----------------------|-----------------------|-----------------------|-----------|
| Volume Resistivity    | 4.00e+16 ohm-cm       | 4.00e+16 ohm-cm       | ASTM D257 |
| Dielectric Constant   | 2.85                  | 2.85                  | ASTM D150 |
|                       | @Frequency 1.00e+6 Hz | @Frequency 1.00e+6 Hz |           |
| Dielectric Strength   | 30.0 kV/mm            | 762 kV/in             | ASTM D149 |
| Dissipation Factor    | 0.0092                | 0.0092                | ASTM D150 |
|                       | @Frequency 1.00e+6 Hz | @Frequency 1.00e+6 Hz |           |
| Arc Resistance        | 120 sec               | 120 sec               | ASTM D495 |

| Processing Properties     | Metric        | English       | Comments |
|---------------------------|---------------|---------------|----------|
| Rear Barrel Temperature   | 280 - 300 Â°C | 536 - 572 Â°F |          |
| Middle Barrel Temperature | 280 - 300 Â°C | 536 - 572 Â°F |          |
| Front Barrel Temperature  | 280 - 300 Â°C | 536 - 572 Â°F |          |
| Nozzle Temperature        | 290 - 310 Â°C | 554 - 590 Â°F |          |
| Melt Temperature          | 300 - 310 Â°C | 572 - 590 Â°F |          |
| Drying Temperature        | 120 Â°C       | 248 Â°F       |          |
| Dry Time                  | 3 - 5 hour    | 3 - 5 hour    |          |
| Moisture Content          | <= 0.020 %    | <= 0.020 %    |          |
| Screw Speed               | 30 - 80 rpm   | 30 - 80 rpm   |          |

## Contact Songhan Plastic Technology Co.,Ltd.

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