

**TRIEX® 3025IR**

Samyang Corporation - Polycarbonate

**General Information**
**Product Description**

- TRIEX is the registered trademark of polycarbonate resin manufactured by Samyang Corporation. TRIEX 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.
- TRIEX 3025IR 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 ? ~ 135 ?)
- High electrical performance
- Good dimensional stability
- Low moisture absorbency
- Good weather resistance

**APPLICATIONS**

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

**General**

Material Status	• Commercial: Active		
Availability	• Asia Pacific	• Europe	• North America
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	• Appliance Components • Automotive Applications	• Electrical/Electronic Applications • Non-specific Food Applications	• Optical Applications
Appearance	• Clear/Transparent		
Forms	• Pellets		
Processing Method	• Injection Molding		

**Properties <sup>1</sup>**

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.20		ASTM D792
Melt Mass-Flow Rate (MFR) (300°C/1.2 kg)	10	g/10 min	ASTM D1238
Molding Shrinkage - Flow (0.118 in)	5.0E-3 to 7.0E-3	in/in	ASTM D955
Water Absorption (24 hr, 73°F)	0.15	%	ASTM D570
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength (Yield)	10200	psi	ASTM D638
Tensile Elongation (Break)	120	%	ASTM D638
Flexural Modulus	299000	psi	ASTM D790
Flexural Strength (Yield)	12500	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (73°F, 0.125 in)	17	ft-lb/in	ASTM D256
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (264 psi, Unannealed)	275	°F	ASTM D648
CLTE - Flow	2.8E-5 to 3.9E-5	in/in/°F	ASTM D696
Electrical	Nominal Value	Unit	Test Method
Volume Resistivity	4.0E+16	ohms·cm	ASTM D257



Dielectric Strength	760 V/mil	ASTM D149
Arc Resistance	120 sec	ASTM D495
<b>Flammability</b>	<b>Nominal Value Unit</b>	<b>Test Method</b>
Flame Rating (0.06 in)	V-2	UL 94

### Processing Information

<b>Injection</b>	<b>Nominal Value Unit</b>
Drying Temperature	248 °F
Drying Time	3.0 to 5.0 hr
Suggested Max Moisture	0.020 %
Rear Temperature	473 to 518 °F
Middle Temperature	500 to 545 °F
Front Temperature	527 to 572 °F
Nozzle Temperature	527 to 590 °F
Processing (Melt) Temp	527 to 590 °F
Mold Temperature	149 to 221 °F
Back Pressure	36.3 to 102 psi
Screw Speed	40 to 70 rpm
Vent Depth	7.9E-4 to 3.1E-3 in

### Notes

<sup>1</sup> Typical properties: these are not to be construed as specifications.

