

## Samyang Trirex® PC-3022IR 15 MFI Clear Polycarbonate With Release

Category : Polymer , Thermoplastic , Polycarbonate (PC) , Polycarbonate, Optical Grade

### Material Notes:

Information provided by US distributor Polymer Technology and Services, LLC (PTS).

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_Samyang-Trirex-PC-3022IR-15-MFI-Clear-Polycarbonate-With-Release.php](http://www.lookpolymers.com/polymer_Samyang-Trirex-PC-3022IR-15-MFI-Clear-Polycarbonate-With-Release.php)

Physical Properties	Metric	English	Comments
Density	1.20 g/cc	0.0434 lb/in <sup>3</sup>	ASTM D792
Water Absorption	0.15 %	0.15 %	24 hours at 73°F
Melt Flow	15 g/10 min	15 g/10 min	
	@Load 1.20 kg, Temperature 300 °C	@Load 2.65 lb, Temperature 572 °F	

Mechanical Properties	Metric	English	Comments
Hardness, Rockwell R	120	120	ASTM D785
Tensile Strength, Yield	62.1 MPa	9010 psi	
	@Thickness 3.17 mm	@Thickness 0.125 in	
Elongation at Break	100 %	100 %	
	@Thickness 3.17 mm	@Thickness 0.125 in	
Flexural Yield Strength	89.6 MPa	13000 psi	
	@Thickness 3.17 mm	@Thickness 0.125 in	
Flexural Modulus	2.21 GPa	321 ksi	
	@Thickness 3.17 mm	@Thickness 0.125 in	
Izod Impact, Notched	7.47 J/cm	14.0 ft-lb/in	
	@Thickness 3.17 mm	@Thickness 0.125 in	

Thermal Properties	Metric	English	Comments
Deflection Temperature at 1.8 MPa (264 psi)	132 °C	270 °F	ASTM D648
Flammability, UL94	V-2	V-2	
	@Thickness 1.59 mm	@Thickness 0.0625 in	

Optical Properties	Metric	English	Comments
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Optical Properties	Metric	English	Comments
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Processing Properties	Metric	English	Comments
Rear Barrel Temperature	249 - 271 Å°C	480 - 520 Å°F	
Middle Barrel Temperature	260 - 271 Å°C	500 - 520 Å°F	
Front Barrel Temperature	271 - 288 Å°C	520 - 550 Å°F	
Nozzle Temperature	266 - 282 Å°C	510 - 540 Å°F	
Melt Temperature	277 - 293 Å°C	530 - 560 Å°F	
Mold Temperature	71.1 - 93.3 Å°C	160 - 200 Å°F	
Drying Temperature	121 Å°C	250 Å°F	
Dry Time	3 - 4 hour	3 - 4 hour	
Injection Pressure	68.9 - 124 MPa	10000 - 18000 psi	
Back Pressure	0.345 - 1.38 MPa	50.0 - 200 psi	
Clamp Pressure	27.6 - 68.9 MPa	4000 - 10000 psi	
Cycle Time - Injection	1.0 - 2.5 sec	1.0 - 2.5 sec	
Cycle Time - Cooling	5.0 - 40 sec	5.0 - 40 sec	
Vent Depth	0.00200 - 0.00800 cm	0.000787 - 0.00315 in	
Screw Speed	40 - 70 rpm	40 - 70 rpm	

Descriptive Properties	Value	Comments
Injection Speed- Edge Gate	Slow-Medium	
Injection Speed- Tab Gate	Medium-Fast	
Injection Speed- Tunnel Gate	Fast	
Shot Size	40-60%	

## Contact Songhan Plastic Technology Co.,Ltd.

Website : [www.lookpolymers.com](http://www.lookpolymers.com)

Email : [sales@lookpolymers.com](mailto:sales@lookpolymers.com)

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

Address : United North Road 215, Fengxian District, Shanghai City, China