

TRIEX® 3022MD

Samyang Corporation - Polycarbonate

General Information
Product Description

- MFR(300°C/1.2kg) 14g/10min; medical devices; suitable for sterilization with high-energy radiation; biocompatible according to ISO10993 and USP Class VI test requirement; low viscosity; injection molding

CHARACTERISTICS

- Easy flow with Medium viscosity
- Biocompatibility according to ISO 10993 and USP Class VI
- EO and Steam sterilizable
- High-energy radiation sterilizable
- Available in both water clear and purple tint

APPLICATIONS

- Medical devices that require high-energy radiation sterilization and biocompatibility supported by ISO 10993 and USP Class VI test requirements

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Biocompatible • Food Contact Acceptable	• Good Flow • Medium Viscosity	• Radiation (Gamma) Resistant
Uses	• Medical Devices	• Medical/Healthcare Applications	• Non-specific Food Applications
Agency Ratings	• ISO 10993	• USP Class VI	
Appearance	• Clear - Blue Tint	• Clear/Transparent	
Forms	• Pellets		
Processing Method	• Injection Molding		

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.20		ASTM D792
Melt Mass-Flow Rate (MFR) (300°C/1.2 kg)	14	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)	9960	psi	ASTM D638
Tensile Strength (Break)	10200	psi	ASTM D638
Tensile Elongation (Break)	100	%	ASTM D638
Flexural Modulus	327000	psi	ASTM D790
Flexural Strength (Yield)	13500	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)	259	°F	ASTM D648
Vicat Softening Temperature	289	°F	ASTM D1525
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



Flammability	Nominal Value	Unit	Test Method
Flame Rating (0.06 in)		V-2	UL 94

Processing Information

Injection	Nominal Value	Unit
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

¹ Typical properties: these are not to be construed as specifications.

