Tritan™ TX1000

Copolyester

Eastman Chemical Company

Message:

Eastman Tritan™ TX1000 is an amorphous copolyester with excellent appearance and clarity. Its most outstanding features are excellent toughness, hydrolytic stability, and heat and chemical resistance. This new-generation copolyester can also be molded into various applications without incorporating high levels of residual stress. Combined with Tritan™ copolyester's outstanding chemical resistance and hydrolytic stability, these features give molded products enhanced durability in the dishwasher environment, which can expose products to high heat, humidity and aggressive cleaning detergents. Tritan™ TX1000 copolyester may be used in repeated use food contact articles under United States Food and Drug Administration (FDA) regulations. Tritan™ TX1000 copolyester is certified to NSF/ANSI Standard 51 for Food Equipment Materials.

General Information	
UL YellowCard	E118289-101106990
Features	Amorphous Copolymer Durable Fast Molding Cycle Food Contact Acceptable Good Chemical Resistance Good Processability Good Toughness High Clarity High Heat Resistance High Impact Resistance Hydrolytically Stable Pleasing Surface Appearance
Uses	Appliances Consumer Applications Household Goods
Agency Ratings	FDA Food Contact, Unspecified Rating NSF 51
Processing Method	Injection Molding

Physical	Nominal Value	Unit	Test Method
Specific Gravity	1.18	g/cm³	ASTM D792
Molding Shrinkage - Flow	0.50 to 0.70	%	ASTM D955

Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (R-Scale, 23°C)	112		ASTM D785

Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus (23°C)	1550	MPa	ASTM D638, ISO 527-2

Tensile Strength			
Yield, 23°C	43.0	MPa	ASTM D638
Yield, 23°C	47.0	MPa	ISO 527-2
Break, 23°C	53.0	MPa	ASTM D638
Break, 23°C	58.0	MPa	ISO 527-2
Tensile Elongation			
Yield, 23°C	6.0	%	ASTM D638
Yield, 23°C	7.0	%	ISO 527-2
Break, 23°C	210	%	ASTM D638
Break, 23°C	190	%	ISO 527-2
Flexural Modulus			
23°C	1550	MPa	ASTM D790
23°C	1500	MPa	ISO 178
Flexural Stress			
23°C	59.0	MPa	ISO 178
Yield, 23°C	62.0	MPa	ASTM D790
Impact	**Nominal Value**	**Unit**	**Test Method**
Notched Izod Impact			
23°C	980	J/m	ASTM D256
-40°C	20	kJ/m^2	ISO 180
23°C	93	kJ/m^2	ISO 180
Unnotched Izod Impact (23°C)	No Break		ASTM D4812
Thermal	**Nominal Value**	**Unit**	**Test Method**
Deflection Temperature Under Load			ASTM D648
0.45 MPa, Unannealed	99.0	°C	
1.8 MPa, Unannealed	85.0	°C	
Optical	**Nominal Value**	**Unit**	**Test Method**
Transmittance (Total)	90.0	%	ASTM D1003
Haze	< 1.0	%	ASTM D1003
Injection	**Nominal Value**	**Unit**	
Drying Temperature	88.0	°C	
Drying Time	4.0 to 6.0	hr	
Processing (Melt) Temp	260 to 282	°C	
Mold Temperature	38.0 to 66.0	°C	

Recommended distributors for this material

Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China