

Tritan™ FX200

Copolyester
Eastman Chemical Company

Message:

Eastman Tritan™ FX200 is an amorphous copolyester that combines excellent clarity and toughness with outstanding heat and chemical resistance. Films manufactured from this new-generation copolyester can be thermoformed without pre-drying and with a wide processing window that allows for product designs that reflect intricate detail. Eastman Tritan™ FX200 copolyester may be used in repeated use food contact articles under United States Food and Drug Administration (FDA) regulations. Eastman Tritan™ FX200 copolyester is certified to NSF/ANSI Standard 51 for Food Equipment Materials.

General Information			
Features	Amorphous		
	BPA Free		
	Food Contact Acceptable		
	Good Chemical Resistance		
	Good Toughness		
	High Clarity		
	High Heat Resistance		
Uses	Consumer Applications		
	Film		
	Safety Equipment		
Agency Ratings	FDA Food Contact, Unspecified Rating		
	NSF 51		
Processing Method	Thermoforming		
Physical	Nominal Value	Unit	Test Method
Specific Gravity	1.19	g/cm ³	ASTM D792
Water Absorption (23°C, 24 hr, 0.254 mm)	0.50	%	ASTM D570
Mechanical	Nominal Value	Unit	Test Method
Taber Abrasion Resistance (23°C, 250.0 µm) ¹	20Haze	%	ASTM D1044
Carbon Dioxide Permeability (23°C, 254.0 µm)	210	cm ³ · mm/m ² /atm/24 hr	ASTM D1434
Elmendorf Tear Strength			ASTM D1922
MD : 23°C, 250.0 µm	4	N	
TD : 23°C, 250.0 µm	4	N	
PPT Tear Resistance			ASTM D2582
MD : 23°C, 250.0 µm	40	N	
TD : 23°C, 250.0 µm	40	N	
Tear Propagation Resistance			ASTM D1938
MD : 23°C, 250.0 µm	310	gf	

TD : 23°C, 250.0 µm	200	gf	
UV Transmittance (250.0 µm) ²	89	%	
Surface Energy			ASTM D5946
Dispersive : 23°C, 250.0 µm	39	dyne/cm	
Polar : 23°C, 250.0 µm	8	dyne/cm	
Total : 23°C, 250.0 µm	47	dyne/cm	
Films	Nominal Value	Unit	Test Method
Film Thickness - Tested	250	µm	
Film Puncture Energy ³ (250 µm)	4.50	J	ASTM D3763
Secant Modulus			ASTM D882
MD : 250 µm	1500	MPa	
TD : 250 µm	1400	MPa	
Tensile Strength			ASTM D882
MD : Yield, 250 µm	43.0	MPa	
TD : Yield, 250 µm	41.0	MPa	
MD : Break, 250 µm	57.0	MPa	
TD : Break, 250 µm	42.0	MPa	
Tensile Elongation			ASTM D882
MD : Yield, 250 µm	8.0	%	
TD : Yield, 250 µm	8.0	%	
MD : Break, 250 µm	110	%	
TD : Break, 250 µm	120	%	
Dart Drop Impact ⁴			ASTM D1709A
-30°C, 250 µm	830	g	
-18°C, 250 µm	830	g	
23°C, 250 µm	830	g	
Trouser Tear Resistance ⁵			ISO 6383-1
MD : 250 µm	10.0	N/mm	
TD : 250 µm	9.00	N/mm	
Oxygen Permeability (23°C, 250 µm, 50% RH)	44	cm ³ · mm/m ² /atm/24 hr	ASTM D3985
Water Vapor Transmission Rate			ASTM F1249
23°C, 100% RH, 250 µm	4.0	g/m ² /24 hr	
38°C, 100% RH, 250 µm	10	g/m ² /24 hr	
Elastomers	Nominal Value	Unit	Test Method
Tear Strength			ASTM D1938
Split ⁶	9.0	kN/m	
Split ⁷	10	kN/m	
Thermal	Nominal Value	Unit	Test Method
Melting Temperature	119	°C	
CLTE - Flow (23°C)	8.0E-5	cm/cm/°C	ASTM D696
Specific Heat			DSC

60°C	1700	J/kg/°C
100°C	1900	J/kg/°C
150°C	2300	J/kg/°C
200°C	2400	J/kg/°C
250°C	2600	J/kg/°C

Optical	Nominal Value	Unit	Test Method
Gloss (60°, 250 µm)	158		ASTM D2457
Refractive Index	1.540		ASTM D542
Transmittance (250 µm)	93.0	%	ASTM D1003
Haze (250 µm)	0.80	%	ASTM D1003
Yellowness Index (250 mm)	0.50	YI	ASTM D1925

NOTE	
1.	average at 25 cycles
2.	Transmission at 380 nm
3.	Dynatup, Total Energy
4.	12.7 mm dia. head, 127 mm dia. clamp, 600 mm drop
5.	200 mm/min
6.	TD, 250 µm, 254 mm/min
7.	MD, 250 µm, 254 mm/min

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection. All rights belong to the original authors. If any infringement occurs, please contact us immediately.

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



WECHAT