Product Data Sheet

Eastman Tritan™ Copolyester MXF121

Application/Uses

- Hand held medical device

Key Attributes

- Excellent hydrolytic stability
- Fast cycle times
- Fast drying times
- Good chemical resistance
- Good heat resistance
- Good melt flowability
- Good toughness
- Improved processability over traditional copolyesters

Product Description

Eastman Tritan™ Copolyester MXF121 is an amorphous opaque product. Eastman Tritan™ Copolyester MXF121 contains a mold release derived from vegetable based sources. Eastman Tritan™ Copolyester MXF121 has many outstanding features that include excellent toughness, hydrolytic stability, heat resistance, chemical resistance, and melt flowability. Eastman Tritan™ Copolyester MXF121 has been formulated for medical devices. Eastman Tritan™ Copolyester MXF121 has passed FDA/ISO 10993 testing for cytotoxicity, skin sensitization, and intracutaneous reactivity.

Typical Properties

Property[a]	Test[b] Method	Typical Value, Units[c]
General Properties		
Specific Gravity	D 792	1.19
Mold Shrinkage	D 955	0.005-0.007 mm/mm (0.005-0.007 in./in.)
Mechanical Properties		
Tensile Stress @ Yield	D 638	43 MPa (6200 psi)
Tensile Stress @ Break	D 638	47 MPa (6780 psi)
Elongation @ Yield	D 638	6%
Elongation @ Break	D 638	133%
Tensile Modulus	D 638	1605 MPa (2.31 x 10^5 psi)
Flexural Modulus	D 790	1748 MPa (2.53 x 10^5 psi)
Rockwell Hardness, R Scale	D 785	109
Izod Impact Strength, Notched @ 23°C	D 256	416 J/m (7.5 ft·lbf/in.)

(73°F)			
Impact Strength, Unnotched	@ 23°C (73°F)	D 4812	NB
Thermal Properties			
Deflection Temperature			
@ 0.455 MPa (66 psi)		D 648	94°C (201°F)
@ 1.82 MPa (264 psi)		D 648	83°C (181°F)
Flammability			
@ Thickness 3.0 mm		UL 94	V2
@ Thickness 1.5 mm		UL 94	V2

Typical Processing Conditions	
Drying Temperature	88°C (190°F)
Drying Time	4-6 hrs
Processing Melt Temperature	260-282°C (500-540°F)
Mold Temperature	38-66°C (100-150°F)

[a] *Unless noted otherwise, all tests are run at 23°C (73°F) and 50% relative humidity.*

[b] *Unless noted otherwise, the test method is ASTM.*

[c] *Units are in SI or US customary units.*

Comments

Properties reported here are typical of average lots. Eastman makes no representation that the material in any particular shipment will conform exactly to the values given.

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