

Technical Data Sheet

Estar™ Copolyester BR403

Applications

- Oral hygiene

Product Description

Estar™ BR403 copolyester is a water-clear polymer that is great for toothbrush applications. It will not crystallize and thus offers wider processing latitude than conventional crystallizable polyesters while still providing an excellent combination of clarity, toughness, and melt strength.

This product has been GREENGUARD INDOOR AIR QUALITY CERTIFIED

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Typical Properties

Property ^a	Test Method ^b	Typical Value, Units ^c
Mechanical Properties		
Flexural Modulus	D 790	2060 MPa (3.0 x 10 ⁵ psi)
Rockwell Hardness, R Scale	D 785	108
Izod Impact Strength, Notched		
@ 23°C (73°F)	D 256	105 J/m (1.85 ft·lbf/in.)
@ -40°C (-40°F)	D 256	40 J/m (0.79 ft·lbf/in.)
Optical Properties (ASTM Method)		
Bio-based Content		0 %
Optical Properties		
Haze	D 1003	0.2 %
Total Transmittance	D 1003	90 %
Thermal Properties		
Crystallization half time		2500 min.
Typical Processing Conditions		
Drying Temperature		70 °C (160 °F)
Drying Time		6 hrs
Processing Melt Temperature		249-271 °C (480-520 °F)
Mold Temperature		16-38 °C (60-100 °F)

^aUnless noted otherwise, all tests are run at 23°C (73°F) and 50% relative humidity.

^bUnless noted otherwise, the test method is ASTM.

^cUnits are in SI or US customary units.

Comments

Properties reported here are based on limited testing. Eastman makes no representation that the material in any

particular shipment will conform exactly to the values given.{TAB}

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