

Technical Data Sheet

Estar™ Copolyester BR001

Applications

- Oral hygiene

Product Description

Estar™ BR001 copolyester has excellent appearance and is nearly water clear. With superior chemical resistance, it maintains its physical properties and appearance when exposed to aromatic oils. BR001 is specifically formulated to provide the optimal combination of chemical resistance, bristle retention, strength, stiffness, processability, clarity, colorability, and feel for toothbrushes.

Under existing United States Food and Drug Administration(FDA) regulations, Eastar™ BR001 copolyester may lawfully be used to make food contact articles which comply with the specifications and conditions of use in 21 CFR 177.1240(a). Migration tests on BR001 samples meet the compliance requirements of 21 CFR 177.1240(3)(1), (2) and (3).

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	2000 MPa (2.9 x 10 ⁵ psi)
Rockwell Hardness, R Scale	D 785	103
Izod Impact Strength, Notched		
@ 23°C (73°F)	D 256	80 J/m (1.5 ft·lbf/in.)
@ -40°C (-40°F)	D 256	40 J/m (0.7 ft·lbf/in.)
Optical Properties		
Haze	D 1003	0.3 %
Total Transmittance	D 1003	91 %
Other Properties		
Bio-based Content		0 %
Typical Processing Conditions		
Drying Temperature		70 °C (160 °F)
Drying Time		3 hrs
Processing Melt Temperature		230-280 °C (450-530 °F)
Mold Temperature		15-30 °C (60-80 °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.

General

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.

Comments

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