EASTMAN

Technical Data Sheet

Eastar™ Copolyester BR203 Natural

Applications

- Oral hygiene

Product Description

Eastar™ BR203 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. BR203 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™ BR203 copolyester may lawfully be used to make food contact articles which comply with the specifications and conditions of use in 21 CFR 177.1240.

This product has been GREENGUARD INDOOR AIR QUALITY CERTIFIED®.
The GREENGUARD INDOOR AIR QUALITY CERTIFIED® Mark is a registered certification mark used under license through the GREENGUARD Environmental Institute (GEI). GEI is an industry-independent, non-profit organization that oversees the GREENGUARD Certification Program. The GREENGUARD Certification Program is an industry independent, third-party testing program for low-emitting products and materials for indoor environments. For more information about GEI and to obtain printable certificates for Eastman™ Copolyesters, visit . Choose Eastman Chemical Company under the Manufacturer category and click search to display a list of our products.

Typical Properties

Property[a]	Test Method[b]	Typical Value, Units[c]
Mechanical Properties		
Flexural Modulus	D 790	1900 MPa (2.75 x 10^5 psi)
Flexural Yield Strength	D 790	67 MPa (9700 psi)
Rockwell Hardness, R Scale	D 785	105
Izod Impact Strength, Notched		
@ 23°C (73°F)	D 256	370 J/m (7 ft·lbf/in.)
@ -40°C (-40°F)	D 256	60 J/m (1.1 ft·lbf/in.)
Optical Properties		
Haze	D 1003	0.3 %
Total Transmittance	D 1003	91 %
Other Properties		
Bio-based Content		0 %
Thermal Properties		
Crystallization half time		8 min.
Typical Processing Conditions		
Drying Temperature		70 °C (160 °F)
Drying Time		3 hrs
Processing Melt Temperature		250-290 °C (480-550 °F)
Mold Temperature		15-30 °C (60-80 °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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