



Technical Data Sheet Eastman TREVA™ Engineering Bioplastic OP6026 Clear

Applications

Ophthalmics

Key Attributes

- Dimensional stability
- · Easy polish and paint
- Excellent flow
- · Warm touch and feel

Product Description

Eastman $TR\bar{E}VA^{TM}$ is a new cellulose-based engineering bioplastic that offers both high performance and reduced environmental impact. $TR\bar{E}VA$ is warm to touch, dimensionally stable and offers excellent flow and easy polish and paint for processing.

Typical Properties

Property ^a	Test Method ^b	Typical Value, Units ^C
General Properties		
Specific Gravity	D 792	1.22
Mechanical Properties		
Tensile Stress @ Yield	D 638	49 MPa (7107 psi)
Tensile Stress @ Break	D 638	48 MPa (6962 psi)
Elongation @ Break	D 638	18 %
Flexural Modulus	D 790	1940 MPa (2.81 x 10 ⁵ psi)
Rockwell Hardness, R Scale	D 785	100
Izod Impact Strength, Notched		
@ 23°C (73°F)	D 256	216 J/m (4.05 ft·lbf/in.)
@ -40°C (-40°F)	D 256	100 J/m (1.87 ft·lbf/in.)
Miscellaneous Properties		
Mold Shrinkage, normal	D 955	0.7 %
Permanence Properties		
Water Absorption, 24 h immersion	D 570	2.3 %
Target Processing Conditions		
Drying Temperature in a Desiccant		75 °C (170 °F)
Dryer		
Drying Time in a Desiccant Dryer		4 hours
Barrel Set Temperature ^e		235 °C (455 °F)
Mold Temperature		85 °C (185 °F)
Injection Speed		30 mm/sec (1.2 in./sec)
Maximum Barrel Residence Time		4 minutes
Thermal Properties		
Deflection Temperature ^d		
@ 0.455 MPa (66 psi)	D 648	114 °C (238 °F)
@ 1.82 MPa (264 psi)	D 648	99 °C (210 °F)
Vicat Softening Temperature ^d	D 1525	135 °C (275 °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.

^dConditioned 4 hours at 70°C (158°F).

^eWith actual measured melt temperature not to exceed 260°C (500°F).

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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2/28/2018 11:35:39 AM

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