



Eastar Copolyester GN001 Preliminary Data Sheet

Property ^a	Test ^b Method	Typical Value, Units ^c
General Properties		
Specific Gravity	D 792	1.27
Mold Shrinkage	D 955	0.002-0.005 mm/mm (0.002- 0.005 in./in.)
Mechanical Properties		
Tensile Stress @ Yield	D 638	50 MPa (7300 psi)
Tensile Stress @ Break	D 638	28 MPa (4100 psi)
Elongation @ Break	D 638	130%
Flexural Modulus	D 790	2100 MPa (3.0 x 10 ⁵ psi)
Flexural Yield Strength	D 790	70 MPa (10200 psi)
Rockwell Hardness, R Scale	D 785	106
Izod Impact Strength, Notched		
@ 23°C (73°F)	D 256	101 J/m (1.9 ft·lbf/in.)
@ -40°C (-40°F)	D 256	37 J/m (0.7 ft·lbf/in.)
Impact Strength, Unnotched		
@ 23°C (73°F)	D 4812	NB
@ -40°C (-40°F)	D 4812	NB
Impact Resistance (Puncture), Energy	@ Max. Load	
@ 23°C (73°F)	D 3763	33 J (24 ft·lbf)
@ -40°C (-40°F)	D 3763	50 J (37 ft·lbf)
Thermal Properties		
Deflection Temperature		
@ 0.455 MPa (66 psi)	D 648	70°C (158°F)
@ 1.82 MPa (264 psi)	D 648	64°C (147°F)
Typical Processing Conditions		
Drying Temperature		71°C (160°F)

Drying Time	6 hrs
Processing Melt Temperature	249-271°C (480-520°F)
Mold Temperature	16-38°C (60-100°F)

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

Comments

Properties reported here are based on limited testing. Eastman makes no representation that the material in any particular shipment will conform to the values given.

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b Unless noted otherwise, the test method is ASTM.

c Units are in SI or US customary units.