

EASTMAN

Product Data Sheet

Eastar Copolyester DN011

Application/Uses

- Displays
- Personal care

Product Description

Eastar Copolyester DN011 is a brilliantly clear polymer having excellent impact strength, chemical resistance, and low shrinkage rates. *Eastar* Copolyester DN011 contains a mold release.

Typical Properties

Property ^a	Test ^b Method	Typical Value, Units ^c
Specific Gravity	D 792	1.23
Mold Shrinkage Parallel to Flow	D 955	0.002-0.005 mm/mm (0.002-0.005 in./in.)
Mechanical Properties		
Tensile Stress @ Yield	D 638	44 MPa (6300 psi)
Tensile Stress @ Break	D 638	54 MPa (7800 psi)
Elongation @ Yield	D 638	4%
Elongation @ Break	D 638	330%
Tensile Modulus	D 638	1800 MPa (2.6 x 10 ⁵ psi)
Flexural Modulus	D 790	1800 MPa (2.6 x 10 ⁵ psi)
Flexural Strength	D 790	66 MPa (9600 psi)
Rockwell Hardness, R Scale	D 785	105
Izod Impact Strength, Notched		
@ 23°C (73°F)	D 256	NB
@ -40°C (-40°F)	D 256	77 J/m (1.4 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	46 J (34 ft·lbf)

@ -40°C (-40°F)	D 3763	46 J (34 ft·lbf)
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Thermal Properties

Deflection Temperature

@ 0.455 MPa (66 psi)	D 648	73°C (163°F)
@ 1.82 MPa (264 psi)	D 648	64°C (147°F)

Optical Properties

Haze	D 1003	<1.0%
Regular Transmittance	D 1003	89%
Total Transmittance	D 1003	92%

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.

^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 to the values given.

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