

## Product Data Sheet

### Eastar™ Copolyester DN114, Natural

#### Application/Uses

- Lighting

#### Product Description

Eastar™ copolyesters are brilliantly clear polymers that have excellent impact strength, chemical resistance, dimensional stability, and low shrinkage. DN114 contains an ultraviolet light inhibitor and a mold release.

This product has been GREENGUARD INDOOR AIR QUALITY CERTIFIED®.

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#### Typical Properties (Preliminary)

Property <sup>a</sup>	Test <sup>b</sup> Method	Typical Value, Units <sup>c</sup>
Specific Gravity	D 792	1.23
Mold Shrinkage Parallel to Flow, 3.2-mm (0.125-in.) thickness	D 955	0.002-0.005 mm/mm (0.002-0.005 in./in.)
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)

#### Thermal Properties

Deflection Temperature		
@ 0.455 MPa (66 psi)	D 648	72°C (162°F)
@ 1.82 MPa (264 psi)	D 648	64°C (147°F)

#### Mechanical Properties

Tensile Strength @ Break	D 638	52 MPa (7600 psi)
Tensile Strength @ Yield	D 638	45 MPa (6500 psi)

Elongation @ Break	D 638	325%
Elongation @ Yield	D 638	5%
Flexural Strength	D 790	66 MPa (9600 psi)
Flexural Modulus	D 790	1800 MPa (2.6 x 10 <sup>5</sup> psi )
Rockwell Hardness, R Scale	D 785	106
Izod Impact Strength, Notched @ 23°C (73°F)	D 256	NB
Impact Strength, Unnotched @ 23°C (73°F)	D 4812	NB
Impact Resistance (Puncture), Energy @ Max. Load 3.2-mm (0.125-in.) Thick Plaques @ 23°C (73°F)	D 3763	45 J (33 ft·lbf)

### Optical Properties

Haze	D 1003	0.4%
Total Transmittance	D 1003	91%

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

<sup>b</sup> Unless noted otherwise, the test method is ASTM.

<sup>c</sup> Units are in SI or US customary units.

### Comments

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

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