

# Product Data Sheet

## Eastar™ GN120 Copolyester

### Application/Uses

- n Appliances
- n Consumer electronics
- n Personal Care and Cosmetics
- n Stationery supplies

### Key Attributes

- n High clarity and transparency
- n High flow copolyester
- n Tough

### Product Description

Eastar™ GN120 Copolyester is a high flow product and contains a mold release. Other outstanding features of Eastar™ GN120 are easily maintained such as excellent appearance and clarity, good physical properties, chemical resistance, and easy processing. Eastar™ GN120 is for sale only in Asia as a high-flow formulation.

### Typical Properties (Preliminary)

Property <sup>a</sup>	Test <sup>b</sup> Method	Typical Value, Units <sup>c</sup>
<b>General Properties</b>		
Specific Gravity	D 792	1.27
Mold Shrinkage	D 955	0.002-0.005 mm/mm (0.002-0.005 in./in.)
<b>Mechanical Properties</b>		
Tensile Stress @ Yield	D 638	48 MPa (7000 psi)
Tensile Stress @ Break	D 638	24 MPa (3500 psi)
Elongation @ Yield	D 638	4%
Elongation @ Break	D 638	75%
Flexural Modulus	D 790	1900 MPa (2.76 x 10 <sup>5</sup> psi )
Flexural Strength	D 790	66 MPa (9600 psi)
Rockwell Hardness, R Scale	D 785	107
Izod Impact Strength, Notched		
@ 23°C (73°F)	D 256	84 J/m (1.5 ft·lbf/in.)
@ -40°C (-40°F)	D 256	46 J/m (0.8 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	35 J (26 ft·lbf)
@ -40°C (-40°F)	D 3763	44 J (32 ft·lbf)
<b>Thermal Properties</b>		
Deflection Temperature		
@ 0.455 MPa (66 psi)	D 648	68°C (154°F)
@ 1.82 MPa (264 psi)	D 648	60°C (140°F)
<b>Optical Properties</b>		
Haze	D 1003	0.4%
Total Transmittance	D 1003	91%
<b>Typical Processing Conditions</b>		
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)

<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 to the values given.

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