

Product Data Sheet

Eastar™ Copolyester GN119

Application/Uses

- Personal Care and Cosmetics

Product Description

Eastar™ GN119 Copolyester is a low-I.V. PETG, for sale only in Asia as a high-flow formulation.

This product has been GREENGUARD INDOOR AIR QUALITY CERTIFIED®. The GREENGUARD INDOOR AIR QUALITY CERTIFIED® Mark is a registered certification mark used under license through the GREENGUARD Environmental Institute (GEI). GEI is an industry-independent, non-profit organization that oversees the GREENGUARD Certification Program. The GREENGUARD Certification Program is an industry independent, third-party testing program for low-emitting products and materials for indoor environments. For more information about GEI and to obtain printable certificates for Eastman™ Copolyesters, visit www.greenguard.org. Choose Eastman Chemical Company under the Manufacturer category and click search to display a list of our products.

Typical Properties

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	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 ⁵ 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)

Thermal Properties**Deflection Temperature**

@ 0.455 MPa (66 psi)	D 648	68°C (154°F)
@ 1.82 MPa (264 psi)	D 648	60°C (140°F)

Optical Properties

Haze	D 1003	0.4%
Total Transmittance	D 1003	91%

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 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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