

Product Data Sheet

Eastar™ Copolyester EN076

Application/Uses

- Cosmetic jar caps
- Cosmetic jars
- Cosmetics/personal care packaging
- Floor care
- Refrigerator interior components

Product Description

Eastar™ Copolyester EN076 is recommended for the thick-walled containers that are prevalent in the cosmetics and personal care markets. This copolyester offers good processability with the benefits of glass such as high clarity, brightness, and good color.

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	1.32
Mold Shrinkage	D 955	0.002-0.005 mm/mm (0.002-0.005 in./in.)
Mechanical Properties		
Tensile Stress @ Yield	D 638	56 MPa (8100 psi)
Tensile Stress @ Break	D 638	26 MPa (3800 psi)
Elongation @ Yield	D 638	4%
Elongation @ Break	D 638	75%
Flexural Yield Strength	D 790	74 MPa (10700 psi)
Flexural Modulus	D 790	2350 MPa (3.4 x 10 ⁵ psi)

Rockwell Hardness, R Scale	D 785	111
Izod Impact Strength, Notched		
@ 23°C (73°F)	D 256	67 J/m (1.2 ft·lbf/in.)
@ -40°C (-40°F)	D 256	33 J/m (0.6 ft·lbf/in.)
Impact Strength, Unnotched		
@ 23°C (73°F)	D 4812	NB
@ -40°C (-40°F)	D 4812	3200 J/m (60 ft·lbf/in.)
Impact Resistance (Puncture), Energy @ Max. Load		
@ 23°C (73°F)	D 3763	31 J (23 ft·lbf)
@ -40°C (-40°F)	D 3763	45 J (33 ft·lbf)

Thermal Properties

Deflection Temperature		
@ 0.455 MPa (66 psi)	D 648	69°C (156°F)
@ 1.82 MPa (264 psi)	D 648	62°C (144°F)

Optical Properties

Haze	D 1003	0.8%
Regular Transmittance	D 1003	86%
Total Transmittance	D 1003	89%

Typical Processing Conditions

Drying Temperature	150°C (302°F)
Drying Time	4-6 hrs
Processing Melt Temperature	277-293°C (530-560°F)
Mold Temperature	16-32°C (60-90°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 exactly to the values given.

Eastman and its marketing affiliates shall not be responsible for the use of this information, or of any product, method, or apparatus mentioned, and you must make your own determination of its suitability and completeness for your own use, for the protection of the environment, and for the health and safety of your employees and purchasers of your products. No warranty is made of the merchantability of fitness of any product, and nothing herein waives any of the Seller's conditions of sale.

23-Nov-2004 11:07:16 AM