

# Product Data Sheet

## Eastman Provista™ Copolyester

### Application/Uses

- Candy packaging
- Displays, Fixtures and Point of purchase
- Food packaging
- Furniture guards
- Plastics for hygiene feminine products
- Pricing channels
- Teething rails
- Tubing

### Key Attributes

- Ease of processing
- Excellent chemical resistance
- Meets FDA regulations for food contact
- Sparkling clarity and high gloss
- Toughness with flexibility

### Product Description

Eastman Provista™ copolyester is a resin specifically developed for extrusion into profiles where aesthetics like high clarity and gloss, coupled with design flexibility drive demand. Compared to commonly used materials, Eastman Provista™ copolyester can often run on most standard processing equipment at increased speeds. An extremely high melt strength makes the resin an excellent choice when extruding profiles into complicated shapes. This product is certified to ANSI/NSF Standard 51.

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### Typical Properties

Property <sup>a</sup>	Test <sup>b</sup> Method	Typical Value, Units <sup>c</sup>
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## General Properties

Specific Gravity	D 792	1.27
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## Mechanical Properties

Tensile Stress @ Yield	D 638	50 MPa (7300 psi)
Tensile Stress @ Break	D 638	28 MPa (4100 psi)
Elongation @ Yield	D 638	4%
Elongation @ Break	D 638	110%
Flexural Modulus	D 790	2100 MPa (3.0 x 10 <sup>5</sup> psi )
Flexural Strength	D 790	68 MPa (9900 psi)
Rockwell Hardness, R Scale	D 785	108
Izod Impact Strength, Notched		
@ 23°C (73°F)	D 256	94 J/m (1.8 ft·lbf/in.)
@ -40°C (-40°F)	D 256	53 J/m (1.0 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	36 J (27 ft·lbf)
@ -40°C (-40°F)	D 3763	35 J (26 ft·lbf)

## Thermal Properties

Deflection Temperature		
@ 0.455 MPa (66 psi)	D 648	70°C (158°F)
@ 1.82 MPa (264 psi)	D 648	62°C (143°F)
Vicat Softening Temperature @ 1 kg load	D 1525	83°C (181°F)

## Optical Properties

Haze	D 1003	0.6%
Regular Transmittance	D 1003	87%
Total Transmittance	D 1003	90%
Gloss @ 60°	D 2457	152

## 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)

<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 typical of average lots. Eastman makes no representation that the material in any particular shipment will conform exactly to the values given.

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