Technical 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™ copolymer 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.

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.

This product has been CRADLE TO CRADLE CERTIFIED^{cm} Silver.
The CRADLE TO CRADLE CERTIFIED Mark is a registered certification mark used under license through McDonough Braungart Design Chemistry (MBDC). MBDC is a global sustainability consulting and product certification firm. The CRADLE TO CRADLE framework moves beyond the traditional goal of reducing the negative impacts of commerce (‘eco-efficiency’), to a new paradigm of increasing its positive impacts (‘eco-effectiveness’). At its core, Cradle to Cradle design perceives the safe and productive processes of nature’s ‘biological metabolism’ as a model for developing a ‘technical metabolism’ flow of industrial materials. Product components can be designed for continuous recovery and reutilization as biological and technical nutrients within these metabolisms. For more information about MBDC and to obtain printable certificates for Eastman Copolyesters, visit www.mbdc.com. Choose Eastman Chemical Company under Company Name in C2C Certified products to display a list of our products.

Typical Properties

Property[a]	Test[b] Method	Typical Value, Units[c]
General PropertiesGeneral Properties		

Specific Gravity	D 792	1.27

Mechanical PropertiesMechanical 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 10^5 psi x 10^5 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 PropertiesThermal 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 PropertiesOptical Properties		
Haze	D 1003	0.6%
Regular Transmittance	D 1003	87%
Total Transmittance	D 1003	90%
Gloss @ 60°	D 2457	152

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

12-Jan-2009 3:37:20 PM