EASTMAN

Product Data Sheet

Eastman Aspira™ One polymer

Application/Uses

- Beverage packaging
- Bottles
- Clear handleware
- Distilled spirits packaging
- Extrusion blow molding
- Food containers
- Glass bottle alternative
- Household packaging
- Juice packaging
- Large liquid containers

Key Attributes

- A recycle code 1
- Bisphenol-A (BPA), antimony and halogen free
- Colorability
- Crystal clear appearance
- Design flexibility
- Easy to extrude, cut, print and seal
- Effective barrier properties
- Excellent chemical resistance
- Integrated handles
- Toughness

Product Description

Eastman Aspira™ One polymer is a resin specifically tailored for producing extrusion blow molded (EBM) containers that are compatible in the PET recycle stream (Resin ID code 1). Aspira One integrates four key material requirements, 1) recyclability, 2) processing efficiency, 3) design flexibility, and 4) bottle performance into a single product. Additional features such as high clarity and gloss improve product shelf appeal. Aspira One runs on most standard processing equipment. Minimal IV degradation during processing enables efficient use of regrind.

Eastman Aspira™ One is cleared for various food contact applications (including contact with most alcoholic beverages) by FCN No. 1234 as described in the Food and Drug Administration (FDA) Inventory of Effective Food Contact Substance Notifications and may be used in full compliance with the United States Federal Food and Drug, and Cosmetic Act, provided that it is used within the limitations set forth for FCN 1234.

Typical Properties

Property[a]	Test[b] Method	Typical Value, Units[c]
General Properties		
Specific Gravity	D 792	1.32
Density	D 792	1.32 g/cm^3
Thermal Properties		
Deflection Temperature @ 0.455 MPa (66 psi)	D 648	68°C (154°F)

@ 1.82 MPa (264 psi)	D 648	62°C (144°F)

Mechanical Properties		
Rockwell Hardness, R Scale	D 785	104
Tensile Stress @ Yield	D 638	55 MPa (7681 psi)
Tensile Stress @ Break	D 638	27 MPa (3771 psi)
Elongation @ Yield	D 638	4%
Elongation @ Break	D 638	57%
Flexural Modulus	D 790	2225 MPa (3.2 x 10^5 psi)
Mold Shrinkage	D 955	0.3%
Izod Impact Strength, Notched		
@ 23°C (73°F)	D 256	58 J/m (1.1 ft·lbf/in.)
@ -40°C (-40°F)	D 256	43 J/m (0.8 ft·lbf/in.)
Impact Strength, Unnotched		
@ 23°C (73°F)	D 4812	NB
@ -40°C (-40°F)	D 4812	2835 J/m (53.1 ft·lbf/in.)
Impact Resistance (Puncture), Energy @ Max. Load		
@ 23°C (73°F)	D 3763	33 J (24 ft·lbf)
@ -40°C (-40°F)	D 3763	4 J (3 ft·lbf)

[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.

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