



Increased customization, greater efficiency and unleashed creativity

Eastman Amphora™ 3D polymer is a low-odor, styrene-free choice that is uniquely suited for 3D Printing applications. With Amphora, makers can create items that are more functional, durable, efficient, and attractive. Now you can fulfill your vision with 3D creations that exhibit excellent aesthetics and superior toughness. Amphora also complies with certain U.S. Food and Drug Administration (FDA) regulations for food contact applications. That means, with Amphora, you'll be able to make a lot of things you can't with other materials. Best of all, you'll be able to make certain your final product **meets your expectations**.

The Amphora Advantage

Amphora provides consumers with 3D solutions that empower you to create stronger, more functional 3D products using low-odor, styrene-free products. Because Amphora can withstand higher temperatures than PLA without degrading, this ensures a smooth flow through the nozzle, creating a consistent, high quality product.

Key Attributes

- Clarity and gloss
- Dimensional stability
- Ease of processing
- Enhanced aesthetics
- Excellent toughness and temperature resistance
- FDA compliance
- Low odor
- Property retention in 3D applications
- Styrene-free
- Workability

Application/Uses

- Production of 3D Printing filaments



Amphora is distributed & converted by Triptech Plastics

www.triptechplastics.com

Property***Test Method******Typical Value, Units*******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	5%
Elongation @ Break	D 638	110%
Tensile Modulus	D 638	1900 MPa (2.7 x 10 ⁵ psi)
Flexural Modulus	D 790	2100 MPa (3.0 x 10 ⁵ psi)
Rockwell Hardness, R Scale	D 785	108
Izod Impact Strength, Notched @23°C (73°F)	D 256	95 J/m (1.8 ft·lbf/in.)
Impact Strength, Unnotched @23°C (73°F)	D 4812	NB

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)

Typical Processing Conditions

Nozzle Temperature	245°C (473°F)
Heated Bed Temperature	70°C (158°F)
Cooling	50 - 90%
Layer Height	0.2 mm
Speed	30 - 60 mm/s
Infill	As needed up to 100%
Perimeter	1.2 mm
Minimal Layer Time	5 seconds

* Unless noted otherwise, all tests are run at 23°C (73°F) and 50% relative humidity

** Unless noted otherwise, the test method is ASTM

*** Units are in SI or US customary units

Properties reported here are typical of average lots. Eastman & Triptech Plastics makes no representation that the material in any particular shipment will conform exactly to the values given.