



Technical Data Sheet

Eastman Amphora™ 3D Polymer AM3300

Application/Uses

- Production of 3D Printing filaments

Key Attributes

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

Product Description

Eastman Amphora™ AM3300 3D polymer is a low-odor, styrene-free material uniquely suited for 3D printing enthusiasts, particularly those who need the flexibility to print within a wide processing temperature range. Amphora AM3300 has good flow properties through the printer nozzle—even at lower temperatures than some other polymers require. These properties make AM3300 more workable at a wider breadth of temperatures, producing reliable results and resulting in less waste. The model of functional aesthetics, Amphora AM3300 can be made into high-quality filament that exhibits advanced overhang ability, excellent looks, and large printing temperature range—empowering large panel of users to create durable and useful items. Amphora AM3300 is also a highly efficient polymer that can help speed up processing times. With the unique combination of a low processing temperature and an elevated temperature resistance, Amphora AM3300, can quickly print creations that are functional, durable, efficient, and attractive.

Typical Properties (Preliminary)

Property ^a	Test ^b Method	Typical Value, Units ^c
General Properties		
Specific Gravity	D 792	1.20 g/cm ³
Mechanical Properties		
Tensile Stress @ Yield	D 638	50 MPa (7210 psi)
Tensile Stress @ Break	D 638	35 MPa (6240 psi)
Elongation @ Yield	D 638	4.5%
Elongation @ Break	D 638	193%
Flexural Modulus	D 790	1800 MPa (2.60 x 10 ⁵ psi)
Flexural Strength	D 790	67 MPa (9717 psi)

Rockwell Hardness, R Scale	D 785	105
Izod Impact Strength, Notched		
@ 23°C (73°F)	D 256	70 J/m (1.3 ft·lbf/in.)
@ -40°C	D 256	38 J/m (0.7 ft·lbf/in.)
Impact Strength, Unnotched		
@ 23°C (73°F)	D 4812	NB
@ -40°C	D 4812	NB

Thermal Properties

Deflection Temperature		
@ 0.455 MPa (66 psi)	D 648	71°C (160°F)
@ 1.82 MPa (264 psi)	D 648	63°C (145°F)

Typical Processing Conditions

Processing Melt Temperature	210-240°C
Heated Bed Temperature	60°C
Cooling	0 to 100%
Layer Height	0.1 or 0.2 mm
Speed	30 to 100 mm/s
Infill	As needed up to 100%
Perimeter	Around 1 mm
Minimal Layer Time	4 sec

^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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