EASTMAN

Technical Data Sheet

Eastman Amphora™ 3D Polymer AM3300

Applications

- Compounders
- Consumer electronics

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

Property[a]	Test Method[b]	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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