

Date of issue: September 1, 2023  
Version: v2.0

## Description

colorFabb\_HT is produced using Eastman Amphora HT5300, and is known as a low-oder, styrene free material, uniquely suitable for advanced 3D printing. With properties of excellent durability, toughness, and high temperature resistance, colorFabb\_HT empowers professional users to create more useful items, making prototyping truly functional.

colorFabb\_HT is enabled by Eastman Tritan™ co-polyester technology.

## Typical Properties

### Mechanical Properties – 3D Printed

	Method	Value	Unit
Youngs Modulus	Tensile, ISO 527-1A	1500	MPa
Tensile Strength	Tensile, ISO 527-1A	50	MPa
Elongation at break	Tensile, ISO 527-1A	26	%
Flexural Modulus	Flexural, ISO 178	N/A	MPa
Flexural Strength	Flexural, ISO 178	N/A	MPa
Impact Strength	Charpy Notch, ISO 179	6.4	kJ/m <sup>2</sup>

### Mechanical Properties – Injection Molded\*

	Method	Value	Unit
Youngs Modulus	Tensile, ASTM D638	N/A	MPa
Tensile Strength	Tensile, ASTM D638	43	MPa
Elongation at break	Tensile, ASTM D638	210	%
Flexural Modulus	Flexural, ASTM D790	1575	MPa
Izod Impact Strength	Izod Notch, ASTM D256	860	J/m
Density	ISO 1183	1.2	g/cm <sup>3</sup>

### Thermal Properties\*

	Method	Value	Unit
Glass Transition Temp.	DSC, ISO 11357	N/A	°C
Melting Temp.	DSC, ISO 11357	N/A	°C
Decomposition Temp.	TGA, ISO 11358	N/A	°C
Heat Deflection Temp. HDT	@0.455 MPA, ASTM D648	94	°C
	@1.82 MPA, ASTM D648	81	°C
Melt Flow Index	MFI, ISO 1133-A	N/A	g/10 min

\*These results are obtained from the information provided by the supplier of the raw material

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## Filament Specifications

	Unit		
Diameter	mm	1.75	2.85
Max. roundness deviation	mm	± 0.05	± 0.1
Ovality	%	≥95	≥95
Net. Filament weight	g	750/2200	750/2200

## Guideline for print settings

	Unit	
Nozzle Temp.	°C	250-280
Bed Temp.	°C	100-120
Bed / surface modification	-	-
Active cooling fan	%	50
Print Speed	mm/s	30-50

## Notes

The reported properties are an average of a batch of 3D specimens.  
The specimens have been printed in XY plane, using 0.15 mm layer height, 100% infill, 0,4 mm nozzle, 270 °C nozzle temperature and 110°C bed temperature.

For best part strength, try to print with the least amount of fan cooling possible.  
For better details and overhangs, increase fan speed.

## Disclaimer

The product- and technical information provided in this datasheet is correct to the best of our knowledge. The information given is provided as a guidance for good use, handling and processing, and is not to be considered as a quality specification. The information only relates to the specific product and the material properties.