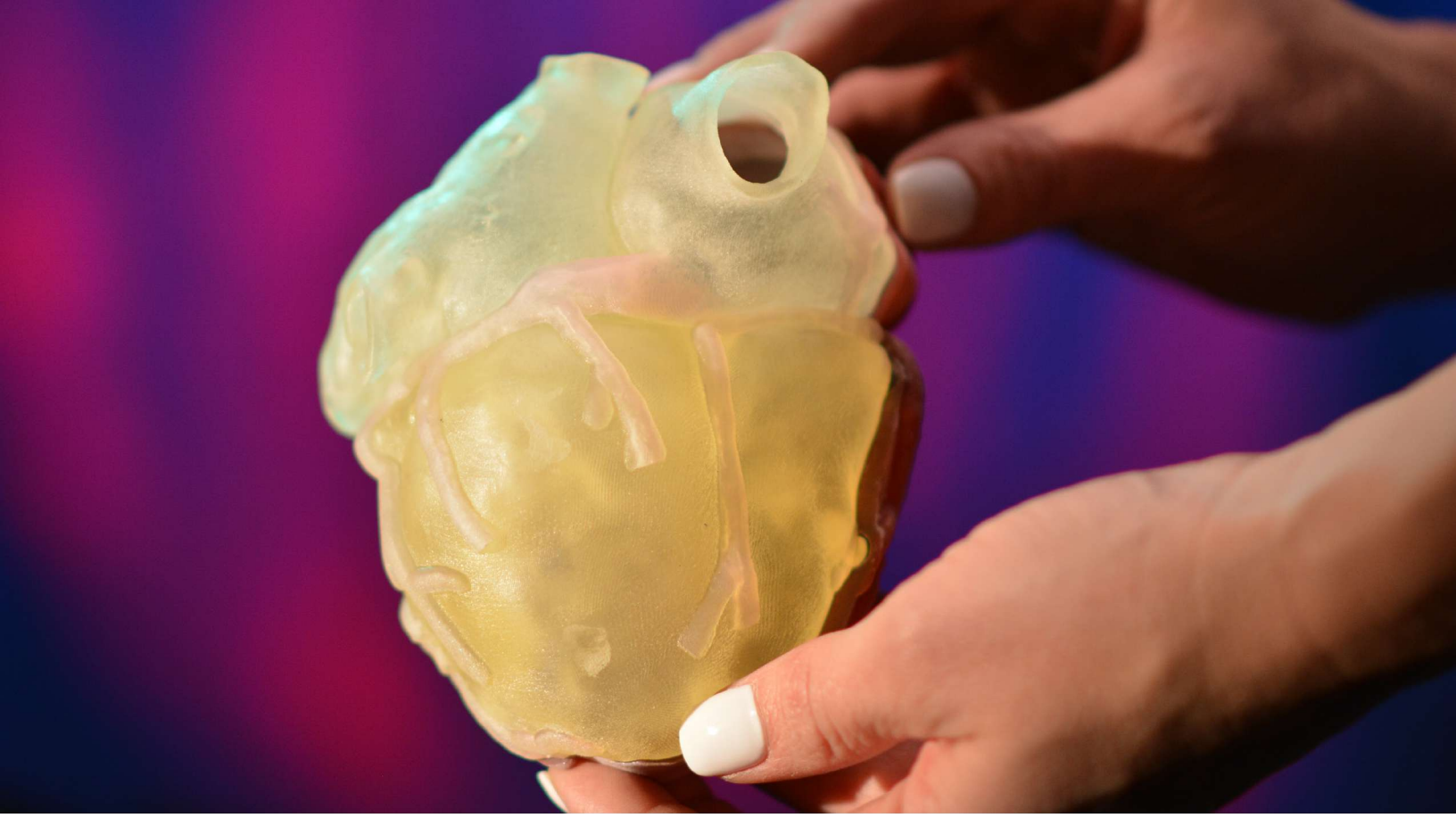
The Design to Manufacturing Co.

MATERIAL

TISSUEMATRIX

OVERVIEW

For more information or advice: theD2Mco.com/contact-us info@theD2Mco.com



Digital Anatomy Materials: TissueMatrix

Stratasys has developed a new series of Digital Anatomy materials designed to enrich the medical modeling field and empower the creation of more realistic anatomical models. Whether for surgical training or medical device development, Stratasys' Digital Anatomy materials provide a new level of accuracy, repeatability and functionality.

By mixing Digital Anatomy materials with Polyjet materials like Agilus30 and the Vero family, users can produce a large range of shore values that can demonstrate almost any anatomy in the human body. Create models with mechanical properties similar to any type of human tissue and perform sutures, punctures, drills, stretches, and other mechanical tests for research, education and training, and medical device development.

TissueMatrix (MED310C)

TissueMatrix is the softest commercially available 3D printing material. This sticky material lets users create models of soft and solid internal organs that feel and behave like native organ tissue when force is applied.

Because of its stickiness and instability, this material cannot be printed as a pure material. TissueMatrix should be mixed with stable materials like Agilus30. Examples for anatomy presets are the Myocardium and Liver presets. To ensure proper material curing while printing a preset that contains TissueMatrix, users should only use one UV lamp, as assigned automatically in prints with TissueMatrix. Using two UV lamps may cause the edges of the model to burn.

Properties	TissueMatrix
Shore00	~27 (tested on a cube 50x50x7.2 mm)
Printer	J750 Digital Anatomy Printer
Print Mode	High Mix
Support Material	SUP706
Number of UV lamps	1
Color	Translucent

Mechanical data

MED310C		standard	min	max
Tensile	Tensile Strength Mpa	Modified D412	0.7	0.9
	% Elongation to break	Modified D412	140	170
Tear Resistance	N/m Kgf/cm	Modified D624	1900 1.9	2300 2.3
SemiSoft DM	shore00	D2240	40	50
Compression	Average compression modulus (Mpa)	Internal procedure	0.25	0.35