

Ref No: SPS-VL350000

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Specification Sheet

GelMA Lyophilizate

Product description	GelMA Lyophilizate is a freeze-dried product of porcine gelatin functionalized with methacrylate groups. It is one of the most popular biomaterials in tissue engineering. Dissolve GelMA Lyophilizate at your target concentration and use it for 3D cell culturing. For a detailed description of preparation, follow the <i>Reconstitution Protocol GelMA Lyophilizate</i> . Mixed with the photoinitiator LAP, GelMA hydrogels are easily photocrosslinked using 365 nm or 405 nm LED modules.	
Intended use	Biocompatible material for 3D bioprinting, <i>Research Grade</i> . For research use ONLY. Not intended for <i>in vitro</i> diagnostics and <i>in vivo</i>	
	uses. Not intended for administration in humans or animals.	
Product number	VL350000	
Shelf life	Minimum 9 months, expiration date stated on package.	
Storage and	Store at -20 to 4°C. Protect from light. Avoid temperature	
handling	fluctuations.	
Safety	Handle in accordance with good hygiene and laboratory safety practices. Read <i>Safety Data Sheet (SDS) GelMA</i> for more information regarding ingredients and potential hazardous compounds.	
Related documents	Reconstitution Protocol and Safety Data Sheet can be downloaded from our website at https://www.cellink.com/global/product/gelma-lyophilizate/ . Scan the QR code below to reach it.	





Property	Specification	Method
Appearance	White to off- white lyophilizate	Visual inspection.
Sterility	Sterile	Tested for the presence of bacteria, fungi and yeast.
Viscosity	168±60 Pa·s	10% in Reconstitution Agent P. Tested using rotational 20 mm plate-plate HR-2 TA Instruments Rheometer, assessed at 1 s ⁻¹ . Flow sweep parameters: shear rate from 0.001 s ⁻¹ to 100 s ⁻¹ , 26°C.
рН	7.0-7.4	10% in Reconstitution Agent P. Measured with pH paper.
Degree of methacrylation	45-55%	¹ H NMR performed at room temperature, acquired with a spectral width of 8013 Hz, or 16 ppm, averaged over 64 scans using 64K time domain points. Acrylate peaks present at 5.4 and 5.6, methyl at 1.9 ppm.