

Specification Sheet

GelMA Kit

Product description	GelMA Kit contains methacrylated gelatin type A powder for use as a 3D biomaterial or additive in biinks. Reconstitute in your chosen neutral buffer to get a 3D printable hydrogel. For a step-by-step instruction follow the Reconstitution Protocol . Addition of a photoinitiator enables photocuring. Temperature-controlled printhead and cooled print bed are recommended when 3D printing GelMA hydrogels.
Intended use	Biocompatible material for 3D bioprinting and casting, Research Grade . 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. Produced under sterile and aseptic conditions.
Product number	VL350000
Shelf life	12 months, expiration date stated on package.
Storage and handling	Store at -20 to 4°C. Avoid temperature fluctuations. Protect from light.
Safety	Handle in accordance with good hygiene and laboratory safety practices. Read Safety Data Sheet for more information regarding ingredients and potential hazardous compounds.
Related documents	Reconstitution Protocol as well as Safety Data Sheet can be downloaded from our website https://cellink.com/product/cellink-gelma-kit/ or scan the QR code below.



Property	Specification	Method
<i>Appearance</i>	White powder	Visual inspection.
<i>Sterility</i>	Sterile	Tested for the presence of bacteria, fungi and yeast.
<i>Endotoxin level</i>	<500 EU/g	Limulus Amoebocyte Lysate assay, Pharmacopoeia 2.6.14 "Bacterial endotoxins": Method D, accredited by SWEDAC. Accreditation Certification 1240: ISO 15189, 2010-11-22.
<i>Cell viability</i>	≥60% live cells	10% in PBS with 0.25% LAP photo initiator. 3D cell culture performed with mesenchymal stem cells for 7 days. Based on routine QC performed every fourth month.
<i>Degree of methacrylation</i>	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.
<i>Viscosity</i>	1-1 000 Pa·s	10% in PBS, pH 7.4. Tested using rotational 20 mm plate-plate HR-2 TA Instruments Rheometer. Flow sweep parameters: shear rate from 0.002 s ⁻¹ to 500 s ⁻¹ , 26°C.
<i>Gelation temperature</i>	26°C (±1°C)	10% in PBS, pH 7.4. Tested using rotational 20 mm plate-plate HR-2 TA Instruments Rheometer. Temperature sweep from 40°C-15°C, at 1% strain and 10 rad/s angular frequency.