

## Specification Sheet

# GelXA BONE

### Product description

GelXA BONE incorporates tricalcium phosphate and hydroxyapatite to mimic the osteoconductive environment of natural bone. GelXA BONE is based on GelMA and incorporates xanthan gum (purified from endotoxins) and alginate to enhance printability, ease-of-use and stability post-printing. GelXA BONE offers dual-crosslinking capabilities through photocuring and treatment with the included Crosslinking Agent. For description on how to mix with cells, bioprint and crosslink, follow the **Bioprinting Protocol**.

### Intended use

Biocompatible material for 3D bioprinting, **Research Grade**. For research use ONLY. Not intended for in vitro diagnostics or in vivo uses. Not intended for administration in humans or animals. Produced under aseptic conditions.

### Product number

IK3X2135

### Shelf life

Minimum 2 months, expiration date stated on package.

### Storage and handling

Store and handle at 2-10°C. **DO NOT FREEZE**.  
Avoid temperature fluctuations.  
Protect from light both during storage and handling of the product.  
Ensure that the bioink container is capped prior to storage to prevent drying.

### 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

Bioprinting Protocol as well as Safety Data Sheet can be downloaded from our website <https://www.cellink.com/product/gelxa-bone/>.

Property	Specification	Method
<i>Appearance</i>	White semi-translucent gel	Visual inspection.
<i>Sterility</i>	Sterile	Raw materials tested for the presence of bacteria, fungi and yeast with method adapted from Ph Eur 2.6.1 and USP <71>. Produced under aseptic conditions from sterilized materials.
<i>pH</i>	6.5-7.4	Assessed with pH paper.
<i>GelMA degree of methacrylation</i>	45-65%	Determined by quantifying free amines with TNBSA and comparing to the unmodified precursor.
<i>Viscosity</i>	100–300 Pa·s at 1 s <sup>-1</sup> <sup>b</sup>	Tested using HR-10 TA Instruments Rheometer with 20 mm plate-plate geometry. Steady-state rotational flow sweep: 24°C, shear rate from 0.001 s <sup>-1</sup> to 200 s <sup>-1</sup> . <sup>b</sup> Characteristic values, not tested on every batch.