



# SUPPORT INX<sup>®</sup> X100

Your Support in Bioprinting



SUPPORT INX<sup>®</sup> X100 is a temperature-stable sacrificial ink. It allows an easy printing process as a result of its shear thinning behavior, as illustrated in Figure 1. At high shear rates, it exhibits a low viscosity which is important for an easy injection from the printing nozzle. Once ejected from the nozzle it quickly recovers its shape, which is crucial for high shape fidelity structuring.

Provided in a ready to print cartridge, SUPPORT INX<sup>®</sup> X100 is biocompatible presented by contact toxicity evaluation. Due to its pH and temperature stability, it can provide long-term support to a variety of printed constructs.

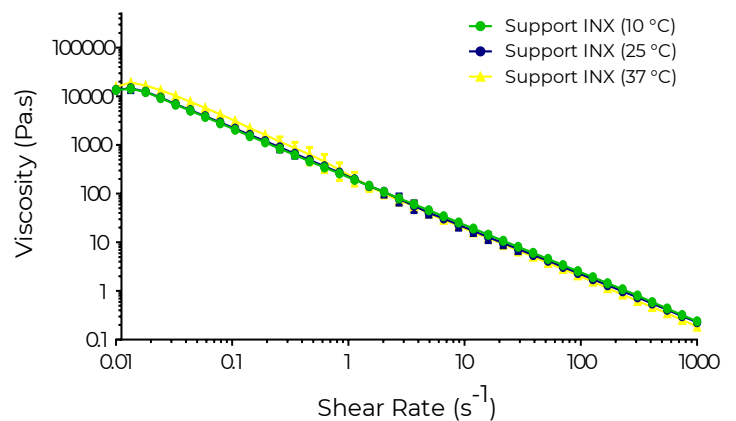


Figure 1: Viscosity and temperature stability of SUPPORT INX<sup>®</sup> X100 at different shear rates.

## BIOLOGICAL APPLICATIONS

SUPPORT INX<sup>®</sup> X100 has been used to generate and sustain 3D structures of a variety of human tissues, including the printing of channel structures for vascularization. For more information on the biological applications of SUPPORT INX<sup>®</sup> X100 and the parameters used to generate these 3D cellular structures, contact us on [info@bioinx.com](mailto:info@bioinx.com)



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## BENEFITS OF SUPPORT INX<sup>®</sup> X100

- ✓ Biocompatible      Exceptional biocompatibility
- ✓ Stability              Temperature and pH stability
- ✓ Easy Printing        Shear thinning behavior enables easy printing
- ✓ Easy Handling        Delivered in a ready-to-use cartridge
- ✓ Reproducibility      Production under strict quality control providing a product that delivers every time

## PROPERTIES & PROCESSING

SUPPORT INX<sup>®</sup> X100 is a transparent gel at room temperature. The physical characteristics of the product are listed in Table 1.

Table 1: Physical properties of SUPPORT INX<sup>®</sup> X100

Physical Properties	SUPPORT INX <sup>®</sup> X100
pH	9 - 11
Viscosity (low shear) (Pa.s)	3000 – 10000
Viscosity (high shear) (Pa.s)	0.1 - 1

SUPPORT INX<sup>®</sup> X100 shows excellent shape recovery properties, as shown in Figure 2 (a). It can be used as sacrificial material to provide temporary support for hollow or more complex structures, as shown in Figure 2 (b) and Figure 2 (c).



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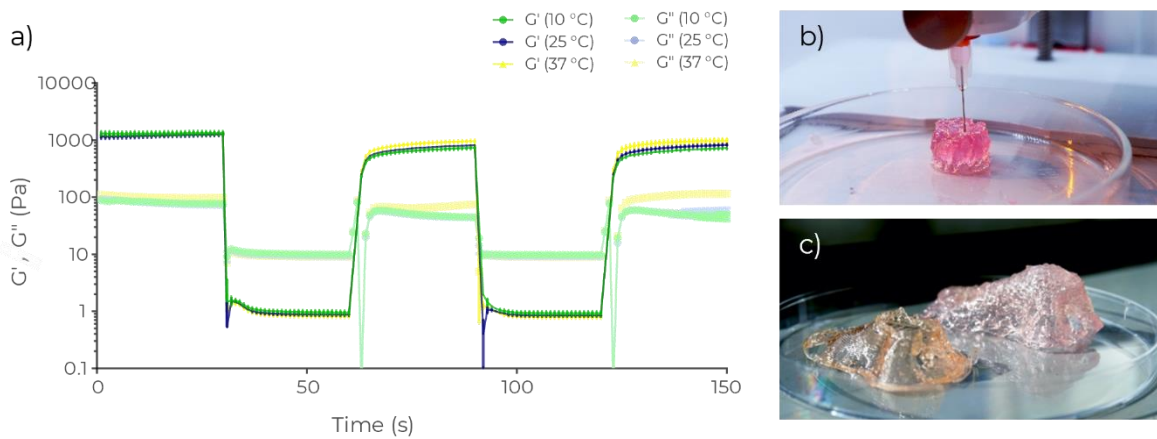


Figure 2: (a) Structure recovery of SUPPORT INX® X100. (b) Printing of SUPPORT INX® X100. (c) Hollow nose structures produced without (left) or with (right) SUPPORT INX® X100 as a temporary support ink.

## 3D PRINTER COMPATIBILITY

Our resins have been used repeatedly and successfully with the following printers:

- ✓ Regemat3D
- ✓ FelixBio
- ✓ Cellink BIOX

If you would like to discuss your printer's compatibility with our bioinks, please contact us at [info@bioinx.com](mailto:info@bioinx.com)