

Because your cells
love native collagen!

FIBERCOLL-FLEX® COLLAGEN INKS

robust | biocompatible | safe

When choosing the right material for 3D model printing, artificial polymers are often used for their rheological properties. However, when it comes to bioprinting, collagen is the cornerstone material due to its outstanding biocompatibility, low immunogenicity, and growth promoting properties. Fibercoll-Flex® tissue models represent in vivo like scaffolds for cell adherence & remodeling in tissue engineering or regenerative medicine.

Ensure optimal cell behavior with native collagen

The Extracellular Matrix (ECM) has a large impact on cell behavior - a critical issue in tissue model applications. Synthetic or chemically modified inks or scaffolds can negatively impact cell performance in artificial 3D models. Our Fibercoll-Flex® inks consist of native bovine collagen type 1 fibrils that resemble the natural ECM collagen and promote authentic cell behavior.

Achieve high cell viability with non-cured models

What makes Fibercoll-Flex® inks special is their fibrillary collagen, featuring an intrinsic stability. This is why unlike other collagen gels for 3D printing, Fibercoll-Flex® inks do not require stabilization with methacrylate or UV curing. The printed models are particularly biocompatible and offer optimal conditions for cell survival, adhesion and „in vivo“-like growth.

Forget temperature control requirements with room temperature stable inks

Temperature control to ensure cell viability or influence model features is a challenging aspect of tissue model printing. Fibercoll-Flex® inks can be used in a broad temperature range from 20-37°C, creating more freedom for your printing procedures and offering optimal physiological conditions for bioprinting.

Achieve robust 3D models with flexible rheological properties

As the only fibrillary collagen in the market, Fibercoll-Flex® inks consist of pure type I collagen fibers with high mechanical strength that enable easy printing under physiological conditions and the generation of robust 3D models with high print resolution and shape fidelity. Both Fibercoll-Flex® qualities can be mixed with other polymers and growth factors.

With **Fibercoll-Flex®-A**, Viscofan has developed an acidic collagen gel for printing of models with a viscosity between 2 – 10 kPa and a high, modulable elastic modulus at different collagen concentrations. Its excellent shear thinning behavior make it the ideal ink for the generation of robust 3D models as cell scaffolds.

With **Fibercoll-Flex®-N**, Viscofan offers a bioink that is pH-neutralized and mixed with living cells before use, enabling the generation of bioprints with encapsulated cells at physiological conditions. The live 3D models can be obtained in a flexible range of 0.2 – 0.9 kPa by easy stiffness regulation. The models with proven biocompatibility can be immediately handled and cultured after printing.



ORDERING INFORMATION

Fibercoll-Flex® inks are delivered as 3 mL units in an individually packed syringe.

Fibercoll-Flex-N®: [Cat. No.: 500069016](#)

Fibercoll-Flex-A®: [Cat. No.: 500069011](#)

For questions & support, contact us at sales@bio.viscofan.com or +49 06201 86-358

Certified Quality



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