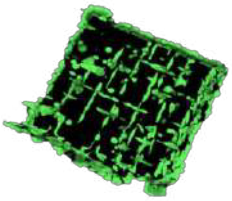
ECM MIMICS:

XFAST INX©

Faster crosslinking = higher cell viability

X FAST INX® provides all the benefits of gelatin while benefitting from our patented **CURADUO®** technology. This results in up to 33 % faster UV crosslinking, and therefore a reduced printing time.

Based on gelatin derived from natural collagen which is modified with photo-crosslinkable functional groups. In the presence of the supplied XL crosslinker, it can be crosslinked with unprecedented efficiency. It resembles the natural ECM even more and is characterized by high cell viabilities (> 94% according to ISO 10993-5).

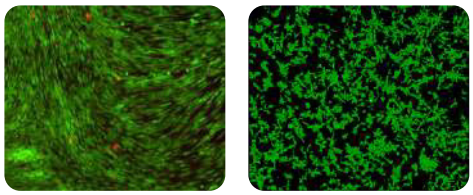


Key Properties:

- **Biocompatibility**: supports **cell adhesion** and proliferation.
- **Reproducibility**: Production under **strict quality control**
- **Biodegradability**: enables **cellular remodelling** of the printed matrix.
- **Easy handling**: Delivered in a **ready-to-use** cartridge. Ready for printing after heating and adding the supplied crosslinker
- **UV-crosslinkable:** CURADUO® based faster crosslinking

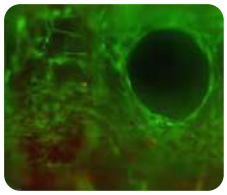
Application potential (soon to be expanded):

Adipose Tissue



ASC

Skin



HFF

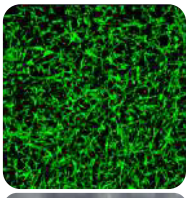
ECM MIMICS:

X GEL-MA INX©

The gold standard since 2000

Gelatin-Methacrylamide, first developed in our lab in 2000, has emerged as one o he gold standards in ssue engineering and biofabrica on worldwide.

X GEL-MA INX® is based on gela n derived from natural collagen which has been modified with photopolymerizable func onal groups which allow crosslinking o ydro gel a er prin ng.

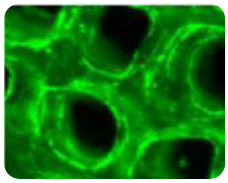


Key Proper es:

- **Biocompatibility**: supports **cell adhesion** and proliferation.
- **Reproducibility**: Produc on under **strict quality control**
- **Biodegradability**: enables **cellular remodelling** o he printed matrix.
- **Easy handling**: Delivered in a **ready-to-use** cartridge. Ready for prin ng after hea ng
- **UV-crosslinkable**

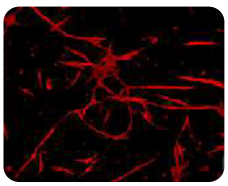
Applica on po ten al:

Adipose Tissue



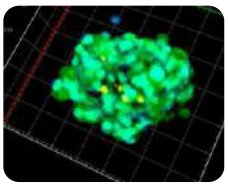
ASC

Blood Vessels



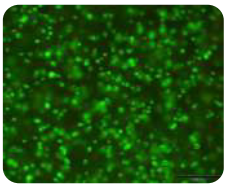
HUVEC

Brain Tissue



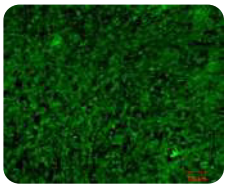
Glioblastoma

Car lage



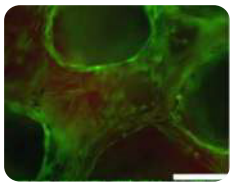
Chondrocytes

Bone Tissue



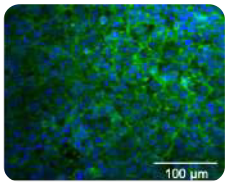
Osteoblasts

Skin



HFF

Cornea



CEnC

SCAFFOLD INX:

X HYDROMELT INX®

Hydrogel printing has never been easier

X HYDROMELT INX® is a synthe c hydrogel based on our patented **CURASOL®** technology. It allows processing from melt rather than from solution. A er swelling, a very st rong and robust hydrogel is obtained.

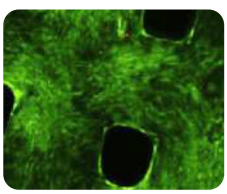
It is non-biodegradable and biologically inert, but can be coated with the provided coa ng to allow cells to adhere and proliferate on the scaffold.

Key Proper es:

- **Biocompatibility**: biocompa ble and non-cell interac ve
- **Reproducibility**: Produc on under **strict quality control**
- **Biostable**: suitable for long term applica ons.
- **Processability:** The only hydrogel formula on which can be processed as a thermoplas ha n ks to CURASOL® technology
- **Easy handling**: Delivered in a **ready-to-use** cartridge. Ready for prin ng after hea ng
- **UV-crosslinkable:** CURASOL® based solid-state crosslinking
- **Mechanical integrity:** Very robust hydrogel suitable for stiff ssue engineering applica ons

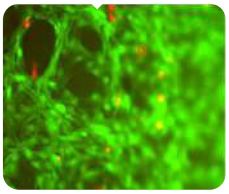
Applica on pote n al (to be expanded):

Adipose Tissue



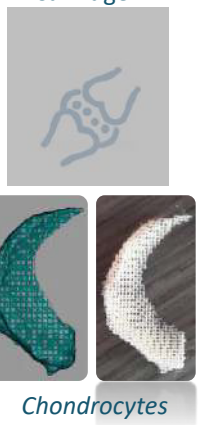
ASC

Bone Tissue



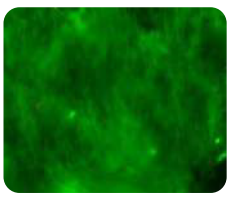
Osteoblasts

Car lage



Chondrocytes

Skin



HFF

SCAFFOLD INX:

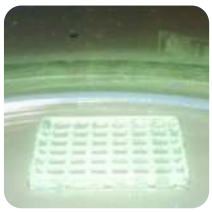
XSOLID INX©

No need for heat

X SOLID INX® is a photo-crosslinkable synthe□c biodegradable polyester based on our patented **CURASOL®** technology. It combines the benefits of conventional stiff polyester materials with low temperature (< 80 °C) processability.

It is biologically inert, but can be coated with the provided coa□ng to allow cells to adhere and proliferate on the scaffold.

Key Proper□es:

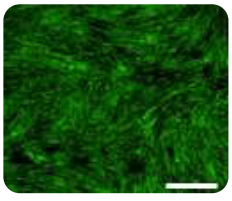


- **Biocompatibility**: biocompa□ble and non-cell interac□ve
- **Reproducibility**: Produc□on under **strict quality control**
- **Biodegradable**
- **Processability:** Thanks to the CURASOL® technology, the material can be processed at low temperature followed by photocrosslinking

- **Easy handling**: Delivered in a **ready-to-use** cartridge. Ready for prin□ng after hea□ng
- **UV-crosslinkable** in the solid state thanks to the CURASOL® technology
- **Mechanical integrity:** Very robust polyester suitable for stiff □ssue engineering applica□ons

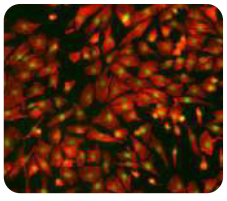
Applica□on pote n□al (to be expanded):

Skin



HFF

Blood Vessels



HUVEC

SMC

SCAFFOLD INX:

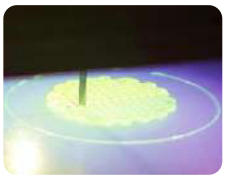
XSTABLE INX©

Stability for long lasting support

X STABLE INX® is a synthetic shear thinning, bio-interactive scaffold ink. It allows for easy printing due to its **shear thinning behaviour**.

It is cell interactive and non-biodegradable. Therefore, it can provide long lasting support to the cells. After photo-crosslinking, a very robust hydrogel is obtained.

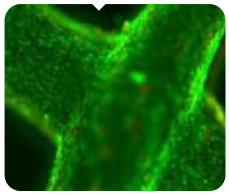
Key Properties:



- **Biocompatibility**: biocompatible and **cell interactive**
- **Reproducibility**: Production under **strict quality control**
- **Biostable**: suitable for long term applications.
- **Processability:** The shear thinning behaviour allow easy printing at a broad temperature range
- **Easy handling**: Delivered in a **ready-to-use** cartridge. Ready for printing
- **UV-crosslinkable**
- **Mechanical integrity:** Very robust hydrogel suitable for stiff tissue engineering applications

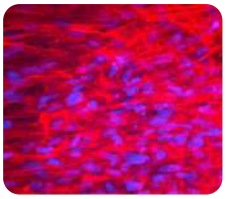
Application potential (to be expanded):

Bone Tissue



Osteoblasts

Skin



nHDF

FELIX BIOprinter

High Performance Customizable 3D BIOprinting

Features

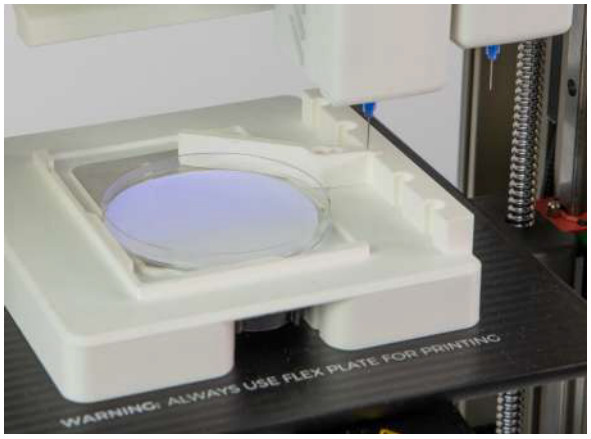
- Open Source Bio Materials
- Fully Sterizable
- Designed to use standard 5ml syringes / petri dishes / culture plates
- Powerful Felix touch screen interface adaptable to multi-machine farm operations
- Syringe cooling / heating
- Print Bed cooling / heating
- Dual syringe system with fast and easy change-over
- Easy syringe positioning
- Automatic bed leveling
- Virtually silent operations
- Fully upgradeable

FELIX BIOprinter

Complete Unit Includes:
2x Print-heads with heating and cooling ability Touchscreen
WiFi connectivity
Simplify 3D software
Accessories Box with Syringe,Needles,Petri Dish etc.

Transparent Cover

Protects from external elements.



UV Light Module

UV Light Modules allows using UV Gels and Bio Materials.Polymerization to cure printed objects layer-by-layer.Modular design can be attached to the printer.

Print Bed Module

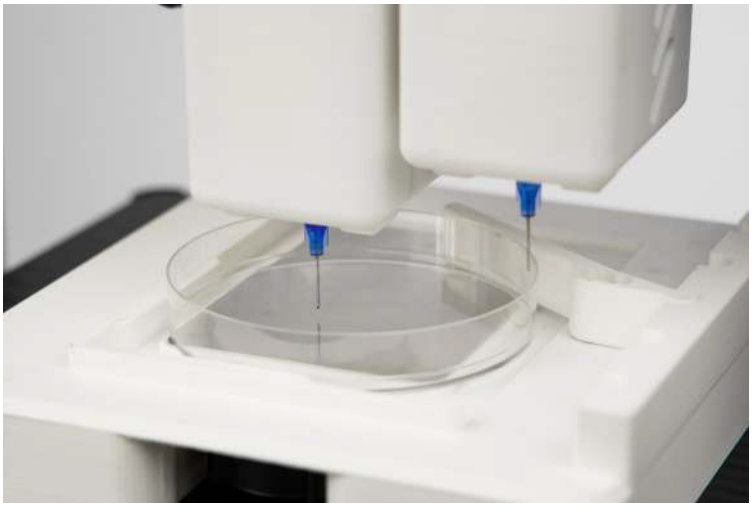
The Print Bed Module secures petri-dishes and wells stability and accuracy.

It can hold 40 to 100ml petri dishes.

Designed to secure well plates.

Cooled & heated bed module,from 2°C to 50°C layer-by-layer.

Modular design can be attached to the printer.



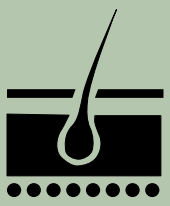
XPECT INX®
your support in bioprinting

FELIX
BIOprinters

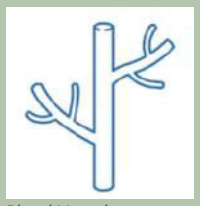
imaginarium


Bone Tissue

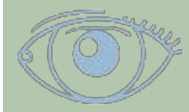
Car⊠lage


Skin

Adipose Tissue


Blood Vessels

Cornea



Brain Tissue

XSOLID INX©

XFAST INX©

XGEL-MA INX©

XHYDROMELT INX©

XSTABLE INX©