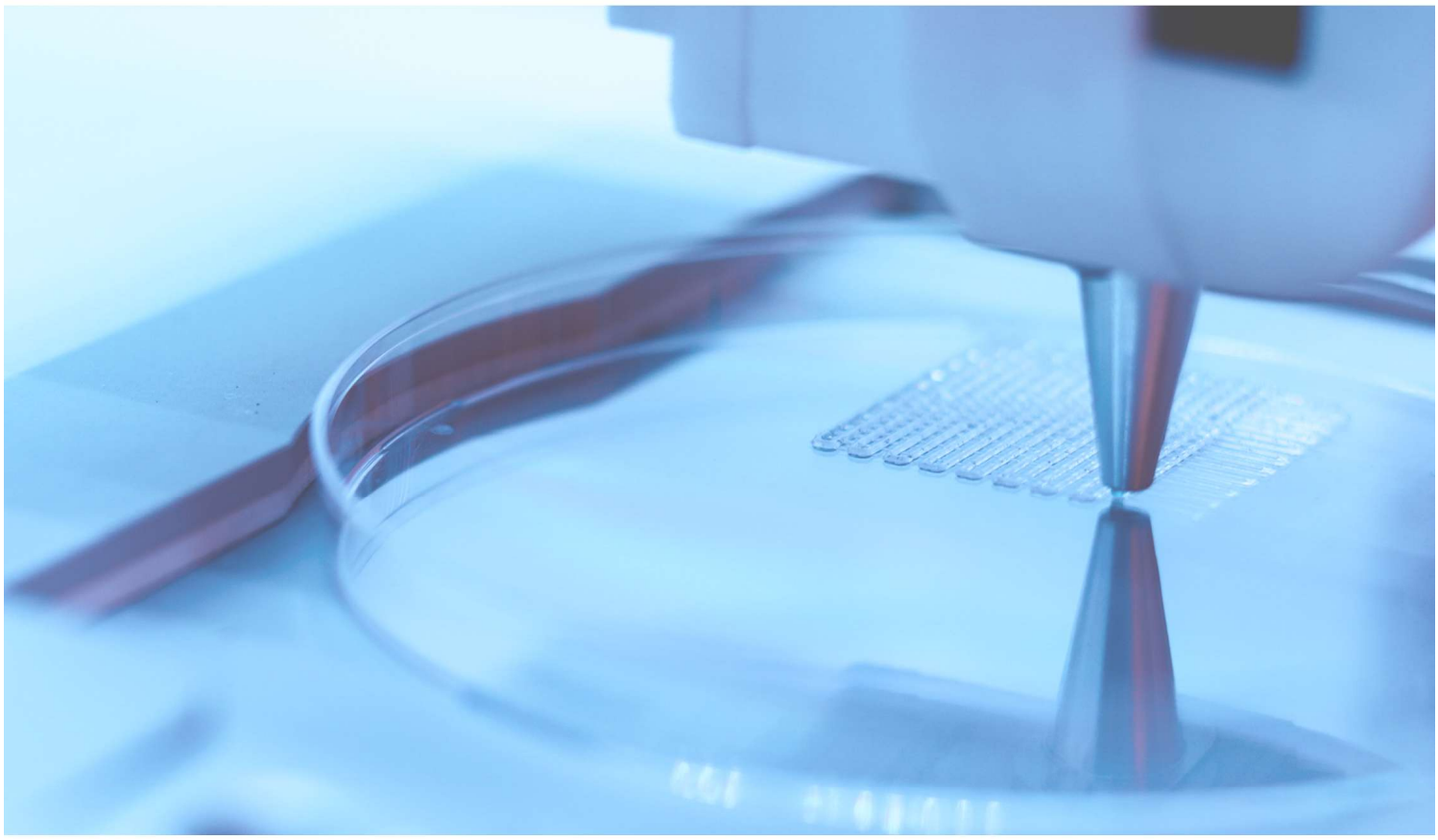
BIO INX®



User Guidelines for

READYPCL INX© X100

General Information

Storage

READYPCL INX X100 should be stored in a fridge at 4 ˚C until ready to use. Protect it from light. Expiry date of the product is indicated on the tube. The product can be stored for a maximum of 3 months after opening and should be consumed before the expiry date.

Intended Use

Research use only. This product is not intended for use in diagnostic or therapeutic procedures.

Safety Information

For more information, please refer to the material safety data sheet.

User Guidelines

Preparation

1. Heat READYPCL INX in a 50 °C water bath for about 1 hour.
2. Pipette the resin into a suitable sample tube for printing, adding 100 µL more than the software's recommended volume. Avoid air bubbles. Ensure the resin is clear, translucent, and free of air bubbles (see Figure 1)
3. Place the filled sample tube in a 50°C water bath for 10 minutes.
4. Wipe the outer wall of the sample tube with tissue paper for drying. Place the tube into the printer and allow it to cool for 10 minutes.
5. Start printing according to the recommended processing parameters below.

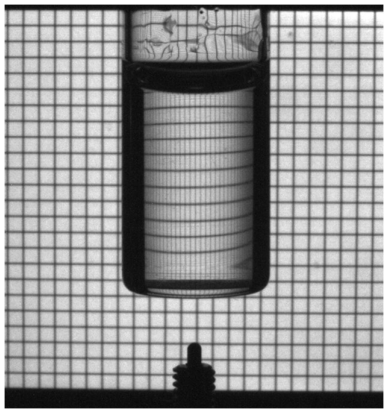


Figure 1 Snapshot of the sample tube containing READYPCL INX

Processing

1. Load the desired CAD model(s) for printing in the software.
2. Start printing process following the recommended processing parameters listed below.

Refractive index	1.47
Dose*	1150 – 1500 mJ/cm^2
Voxel size	25 µm

***** The dose to print a 3D structure will depend on the geometry of the CAD model and the vial size, and may require further adaptations.

3. After printing, leave the sample inside the printer for 5 minutes to allow dark curing.
4. Remove the sample tube from the printer, add acetone, and shake gently. Then, place the tube in a warm water bath for 10 minutes to reduce viscosity for easier handling.
5. After warming, carefully discard the liquid while keeping the printed structure inside the tube.
6. Refill the tube with acetone and let it sit at room temperature for 5 minutes to wash the sample further.
7. Pour the contents into a glass container to extract the printed structure, avoiding spatulas or tweezers to prevent damage.
8. Wash the structure in fresh acetone at room temperature for about 10 minutes.

Post-Processing

1. The structure should be further irradiated with light for 30 min (wavelength: 300 – 405 nm, intensity: 10 mW/cm^2) while being immersed in acetone for a complete crosslinking reaction. (Close the recipient with a transparent glass lid to avoid evaporation of acetone during irradiation)
2. After post-curing, the printed structure should be washed further by immersing in (refreshed) acetone for 2h followed by immersion in deionized water for 1h.
3. Store the samples in a fridge.

Sterilization

The samples can undergo sterilization through either a 2-hour UV-C irradiation process or autoclaving at 121 °C.