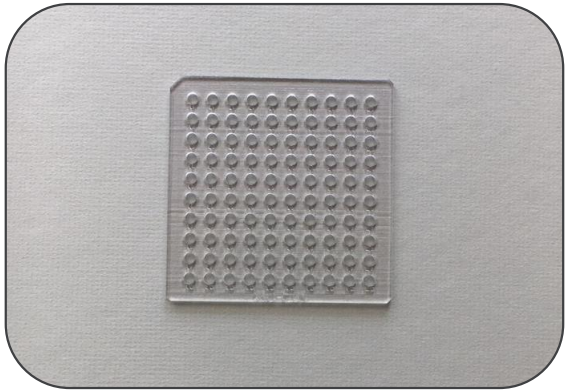
12-ID GUIDANCE FOR PACKING A MAIL-IN KIT

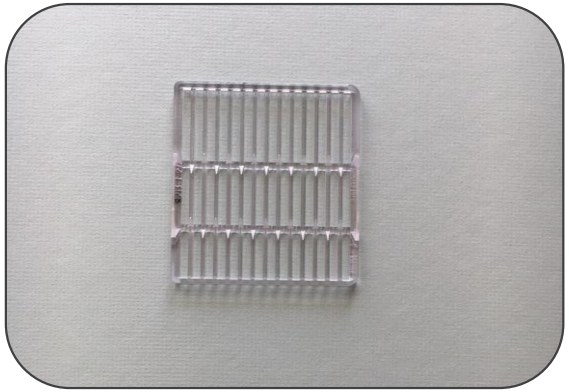
USER frame orientation

If different sample holders were requested in the same order, match the sample plate to the frame according to the code:



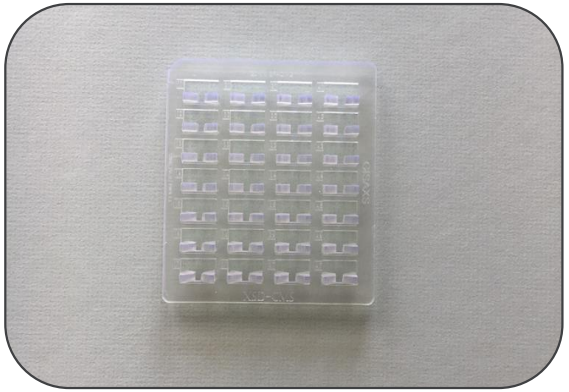
SSP

- Solid sample plate



CPT

- Capillary plate



GPT

- GISAXS plate

12-ID GUIDANCE FOR PACKING A MAIL-IN KIT

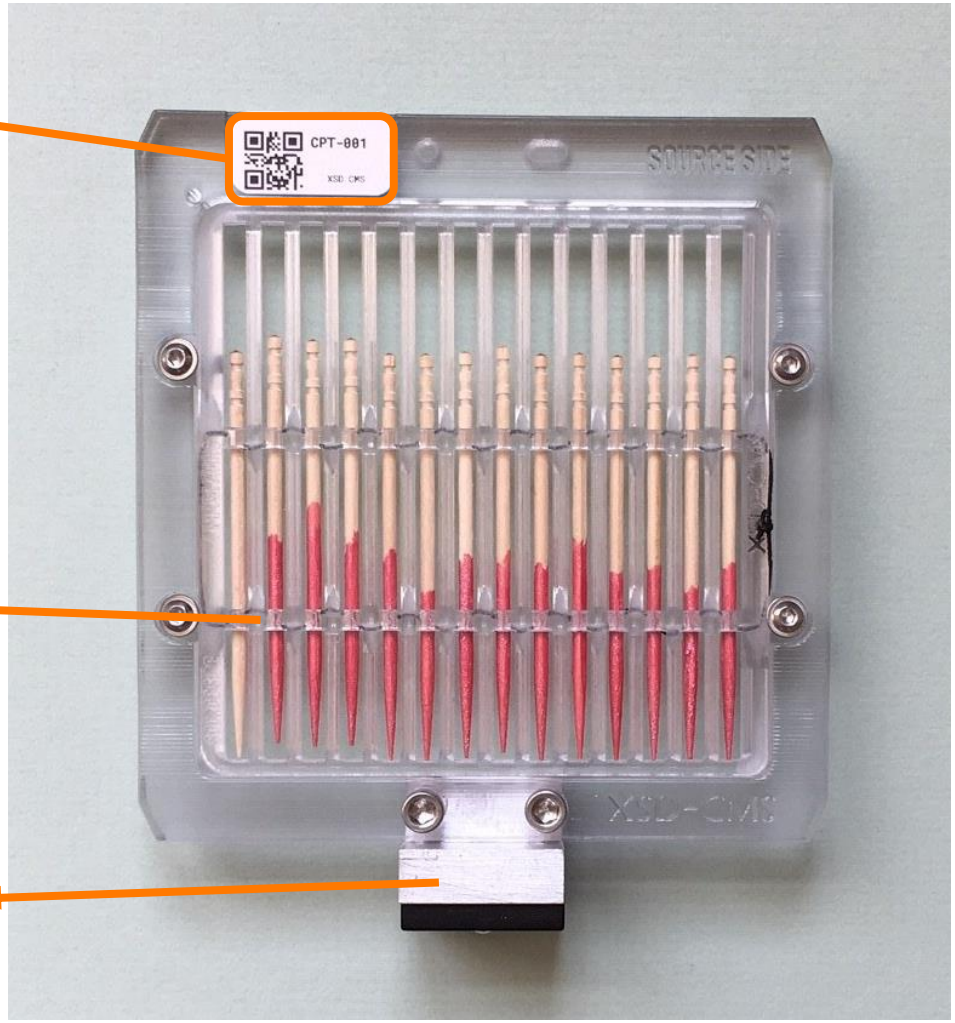
USERS packing up CPT – capillary plate

QR code:
Frame ID = CPT
Frame index = 1

Capillaries:

- 14 positions per holder
- Intended for liquid samples
- **Capillaries must be well sealed**
- Need to be filled with at least 20mm of liquid
- **Need to include a blank, solvent only capillary**
- Small area where measurement will not be possible across this plastic piece

Please leave the angle bracket and kinematic mount attached to the frame



12-ID GUIDANCE FOR PACKING A MAIL-IN KIT

USERS packing up CPT – capillary plate

You will need:

- 2mm hex key
- Sharp scissors

Might be helpful to have:

- Fine grit sand paper
- Pointed tweezers

For packing up:

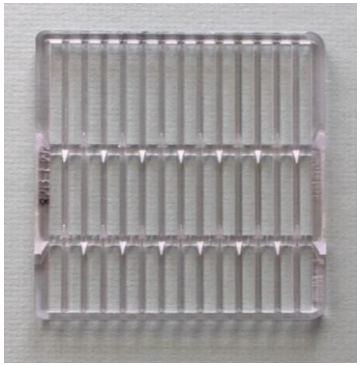
- 2 pieces of 4 ½-inch square pieces of cardboard

12-ID GUIDANCE FOR PACKING A MAIL-IN KIT

USERS packing up CPT – capillary plate

Before starting: Test the fit of the sample holder in the frame before loading the capillaries in it

You may have to sand these edges



if it does not fit

If the sample holder does not fit into the frame easily, do not force it. Instead:

- Lightly sand the edges of the sample holder
- Rinse under running water to remove the dust.
- Test the fit again
- Repeat the process until the sample holder easily fits into the frame.

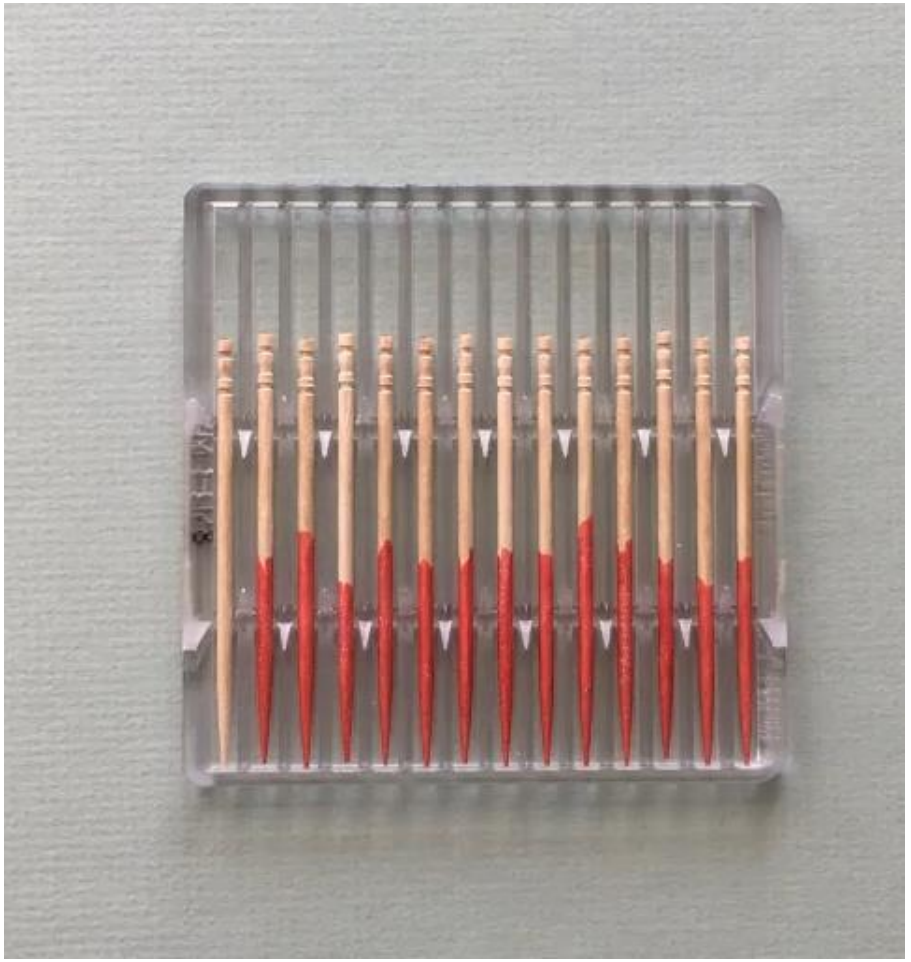
12-ID GUIDANCE FOR PACKING A MAIL-IN KIT

USERS packing up CPT – capillary plate

Assembly:

- Lay the sealed capillaries in the holder
- Use the elastic thread to secure the capillaries in place using the spurs
  - The elastic thread may already be tied in a loop for you
  - If the sample holder has not been used before, some bits of resin may come free during this process
- Tie off the elastic
- Snip any loose ends

The elastic thread is 0.5mm elastic and can be found at the craft store under the name “bracelet elastic.”



Link to video clip on how to secure capillaries to the holder:
https://12id.xray.aps.anl.gov/img/CPT-securing-inst.mp4

12-ID GUIDANCE FOR PACKING A MAIL-IN KIT

USERS packing up CPT – capillary plate

If the elastic thread is missing or breaks, go to the craft store to find more.

The elastic thread is 0.5mm elastic and can be found at the craft store under the name “bracelet elastic.”

To make a new loop:

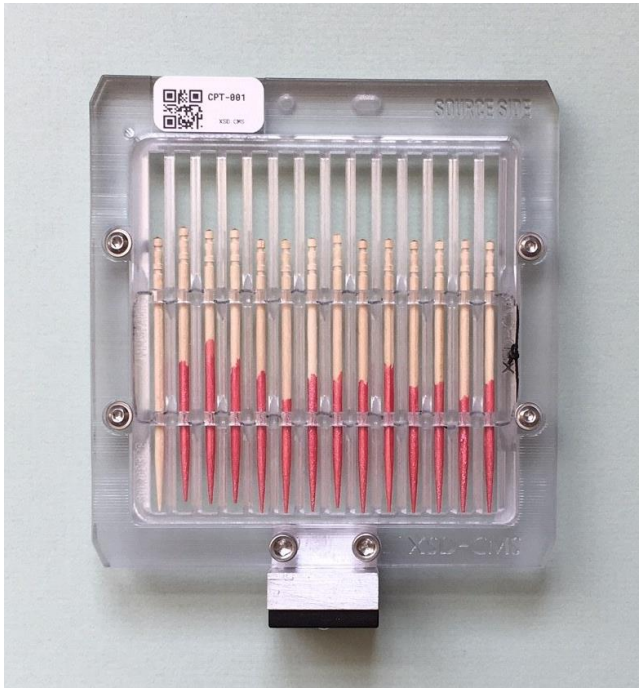
- Cut a 10” length
- Tie it around an item that is 1¾”-2” in diameter to make a loop

12-ID GUIDANCE FOR PACKING A MAIL-IN KIT

USERS packing up CPT – capillary plate

Assembly:

- Lay the sample holder in the frame in the orientation you like
- Use the enclosed M3 x 8mm button head screws to fasten the sample holder to the frame



Vertical:

Position 1 is on the left
Position 14 is on the right

Horizontal:

Position 1 is at the top
Position 14 is at the bottom

12-ID GUIDANCE FOR PACKING A MAIL-IN KIT

USERS packing up CPT – capillary plate

Assembly:

Cut out two pieces of cardboard that are 4½” square

Secure the pieces of cardboard with rubber bands

Place the assembly in the 6”x6” zip top bag

Enclose in 7”x9” bubble bag

12-ID MAIL IN PROGRAM

USER instructions for returning packages

Sample frames must be properly packed according to DOT standards when sending them to the APS. The box the frames came in can be re-used if the samples are non-hazardous.

APS webpage on hazardous materials shipping: https://www.aps.anl.gov/Safety-and-Training/Safety/Using-Material-Samples/Transporting-Hazardous-Materials

Return address:

Non-hazardous samples:

ATTN: (beamline support person)
Argonne National Laboratory
9700 South Cass Ave.
APS sector 12-ID
Lemont, IL 60439

Hazardous samples:

ATTN: (beamline support person)
c/o Building 46, hazardous materials receiving
Argonne National Laboratory
9700 South Cass Ave.
APS sector 12-ID
Lemont, IL 60439

It is helpful to have the GUP or group name marked on the outer carton