Cleaning and Filling SAXS Capillaries

1) It is recommend to watch the video on loading the capillaries before running samples on the SAXS systems.
2) Wear gloves while handling the capillaries.
3) Remove the caps from the capillary. Note which end of the capillary the caps are from.
4) Wash the caps with DI water, isopropanol, DI water.
5) Flush the capillary with DI water. This can be done with the squirt bottles or with a syringe.
6) If needed, flush with 10mls of 10% Contrad using a syringe.
7) Flush the capillary with isopropanol. This can be done with the squirt bottles or with a syringe.
8) Flush the capillary with DI water.
9) Dry the capillary with air using the syringe. **DO NOT** use any other method to dry the capillary.
10) Wash the capillary with about 100µl of buffer.
11) Load the capillary with sample or buffer for SAXS analysis. If using the SAXS1 capillary, load 35µl of sample. If using the SAXS2 capillary, use 100µl, but only add enough sample to fill the capillary.
    a. It is best to hold the capillary horizontal to the table when loading sample.
    b. It is important not to have any air bubbles that are within the analysis window of the capillary.
12) Place the caps on the capillary by alternating the tightening. The liquid in the capillary will move as the caps are tightened. Makes sure the liquid ends up in the center of the analysis window.
13) If using a disposable capillary, seal the ends of the capillary.
14) If using a disposable capillary, test the capillary in a vacuum chamber to ensure there are no leaks.
15) Place into SAXS instrument for analysis. See appropriate operating procedure.
16) When SAXS analysis is completed, remove and clean the caps from the capillary. Note which end of the capillary the caps are from.
17) Flush the capillary with DI water. This can be done with the squirt bottles or with a syringe.
18) If needed, flush with 10mls of 10% Contrad using a syringe.
19) Flush the capillary with isopropanol. This can be done with the squirt bottles or with a syringe.
20) Flush the capillary with DI water.
21) Dry the capillary with air using the syringe. **DO NOT** use any other method to dry the capillary.
22) If no other samples are to be analyzed stop here.
23) If analyzing other samples go back to step 10.