

ARIA FUSION - CONTRAD CLEAN PROTOCOL

FOR THIS PROTOCOL YOU WILL NEED:

- Contrad 70 (located under the sink in the FCCF) looks like this ->
- 15mL falcon tube to make working solution
- MQ DiH2O from STEM CORE sink
- 5mL FACStube



1. **Make 50% Contrad70 in a 15mL falcon tube.** This gives you enough for multiple rounds of Contrad Cleaning if need be. Dilute Contrad70 with MQ DiH2O only.
2. **Aliquot 3mL of 50% Contrad70 into 5mL facstube.**
3. **Ensure CLN (Closed Loop Nozzle) is installed and key is in locked position.** This step is very important because if that key CLN is not installed properly and locked into place the residual Contrad can be very hard to clean out of the sort block and nozzle/key hole.
4. **Perform Clean Flow Cell with 3mL of 50% Contrad70** (Cytometer Menu > Cleaning Modes).
 - a. Do this 2x at least to ensure 50% Contrad is fully soaking the entire flow cell.
5. **Let 50% Contrad sit in Flow Cell for 1 hour.** Set a timer as this step and the following are time sensitive. If the Contrad sits for too long it can remove the CLN o-ring, in which case the CLN is then useless and will not fully seal to the bottom of the flow cell.
6. **Perform Clean Flow Cell with 3mL of MQ DiH2O.**
 - a. **Do this 2x.** This step is to flush out the majority of the Contrad70 from the flow cell along with any cellular debris.
7. **Turn on stream for 1 minute with CLN in.** This step is to wash the CLN clean of any residual Contrad70.
 - a. Turn off stream.
8. **Flush Flow Cell and Sample line with MQ DiH2O.**
 - a. Remove CLN and Start Stream (no nozzle this time).
 - b. Load a tube of MQ HiH2O and run at Flow Rate 11 for 10 minutes.
9. **Stop Stream and Dry the inside of the sort block and voltage plates with kimwipe.**
10. **Install 100um nozzle and start stream**
11. **Load a tube of MQ DiH2O on a Flow Rate of 2 and briefly check that event rates are low.**
12. **Check with CST beads that Peaks on UV and Violet channels look good (histograms)**
 - a. If histograms do not look good, this process Steps 1-11, are to be repeated.
13. **Run CS&T to check that CVs are within range and there are no warnings.**
14. **Perform Shutdown** *Note: Avoid shutting down in ethanol if the bead peaks suggest the instrument may be dirty as debris can become very tenaciously fixed and difficult to remove.