ImageStream® Instrument Decontamination

Materials for Steri-Lyse Buffer

1.) **NaOH** 10M Sodium Hydroxide Solution (Sigma # 72068)
2.) **Na CLO** 10% Sodium Hypochlorite (Sigma # 425044)
3.) **SDS** Sodium Dodecyl Sulfate Powder (Sigma # L4390)
4.) **diH2O** (Sterile or Filter Sterilized)

Steri-Lyse Buffer Preparation

1.) In 1L glass Erlenmeyer, in fume hood, dissolve 0.5% SDS W/V in diH2O with a heated stir plate.
2.) Add 20ml NaOH to 0.2M.
3.) Add 100ml NaCLO to 1%.
4.) Make buffer fresh before each use, 2L may be required for entire protocol.

Reagent	Amount	Final Concentration
diH2O	880ml	Na
SDS	5g	0.5%
10M NaOH	20ml	0.2M
10% NaCLO	100ml	1%

Instrument Decontamination

1.) In a fume hood prepare two 1 liter flasks of Steri-lyse buffer.
2.) Prepare fresh/sterile instrument buffers to eliminate the possibility of re-contaminating the instrument after the decontamination is complete. Use the new buffers throughout.
3.) Remove and empty to waste each buffer tank in the instrument. (SpeedBeads, Sterilizer, Cleanser, De-bubbler, Rinse, Wash and Waste).
4.) Rinse each tank thoroughly with sterile water followed by small volumes of Steri-lyse buffer. Be sure to rinse the outside of the buffer tubing and caps as well.
5.) Place Steri-Lyse buffer in each container (~150ml for small tanks 300ml for large tanks). For the SpeedBead tube use 10ml Steri-lyse buffer in fresh15ml conical.
6.) Swirl to coat the inside of each tank with Steri-lyse buffer.
7.) Launch INSPIRE and run startup script without running ASSIST.
8.) Run the "Shutdown" script without shutting the instrument off. This will fill all tubing with Steri-lyse buffer. Repeat, running the buffer twice through the tubing for obvious contaminations.
9.) Rinse each tank thoroughly with sterile water followed by small volumes of the appropriate buffer. Use sterilizer buffer to clean the waste tank. Be sure to rinse the outside of the buffer tubing and caps as well (SpeedBeads, Sterilizer, Cleanser, De-bubbler, Rinse, Wash and Waste).
10.) Replace all the appropriate buffers on the instrument and run the "Shutdown" script without turning the instrument off.
11.) Run the "Startup" script with ASSIST calibration and prepare the instrument for normal operation. If ASSIST fails repeat "Startup".

Workflow

Prepare buffers (~10min)

↓

Clean tanks and tubing (~5min)

↓

Run Steri-lyse buffer through all internal tubing. (~10min +35min)

↓

Wash out Steri-lyse buffer and load instrument buffers (35min +10min)