

SOP – PO53

Making 0.1 M HCl Buffering Agent

Purpose: To **lower the pH** in a solution i.e. make a more acidic solution

Procedure:

1. Put 95 mL of millipore water into a 100 mL graduated cylinder
2. Procure 10 Molar HCl located underneath the hood in the cytometry lab
3. Pipette 1 mL of HCl and transfer it into the 100 mL graduated cylinder
4. Add millipore water to the graduated cylinder to the 100 mL mark.
5. Transfer the solution from the graduated cylinder to an appropriately marked 100 mL container. The solution will give off considerable heat. Do not cap the bottle until the solution is cool.

The Making of 0.1 M NaOH Buffering Agent

Purpose: To **raise the pH** in a solution i.e. make a solution more basic

1. On a scale, weigh out 1.95 grams of sodium hydroxide (NaOH) pellets.
2. Measure 475 ml of Millipore water in a 500 ml graduated cylinder.
3. Add pellets carefully to the 500 ml graduated cylinder. The solution will give off heat.
4. Add Millipore water to the graduated cylinder up to the 500 ml mark.
5. When the pellets are dissolved and the solution has cooled, transfer the solution to an appropriately labeled container. Do not cap the bottle until the solution is cool.

Created By: Benji Milanowski, August 30th, 2004

Verified By:: _____ Date: _____.