## Cleaning procedure beakers

\# of times cleaning acid has been used (discard after 5 x ):
date:

| Step \# | Action | Check |
| :---: | :---: | :---: |
| 1 | remove labels with ethanol from a squirt bottle and rinse interior and exterior with tap H2O and swab interior surfaces with a moistened Kimwipe |  |
| 2 | rinse with $\mathrm{MQ} \mathrm{H}_{2} \mathrm{O}$ squirt bottle |  |
| 3 | add $\sim 6 \mathrm{M} \mathrm{HCl}\left(50: 50 \mathrm{MQ} \mathrm{H}_{2} \mathrm{O}\right.$ : reagent HCl$)$-- just enough to cover the bottom of the jars; 1-3 ml for vials |  |
| 4 | cap jar and place on hotplate at $80-100^{\circ} \mathrm{C}$ for at least 1 hr (best $=$ overnight) |  |
| 5 | swirl and collect acid droplets at bottom |  |
| 6 | discard acid (ultimately into ' HCl waste’ carboy) and rinse jar and cap twice with MQ H2O |  |
| 7 | add $\sim 7 \mathrm{M} \mathrm{HNO}_{3}\left(50: 50 \mathrm{MQ} \mathrm{H} \mathrm{H}_{2} \mathrm{O}\right.$ : reagent $\mathrm{HNO}_{3}$ ) -- just enough to cover the bottom of the jars; 1-3 ml for vials |  |
| 8 | cap jar and place on hotplate at $80-100^{\circ} \mathrm{C}$ for at least 1 hr (best if left overnight) |  |
| 9 | swirl and collect acid droplets from cap and walls |  |
| 10 | discard acid (ultimately into ' $\mathrm{HNO}_{3}$ waste’ carboy) and rinse jar twice with MQ H2O |  |
| 11 | dry in fume cupboard and if you are not immediately using the jars, store them in Ziploc bag or plastic bin |  |

## Cleaning procedure centrifuge tubes

\# of times cleaning acid has been used (discard after 5 x ):
date:

| Step \# | Action | Check |
| :---: | :--- | :---: |
| 1 | add 1-2 ml 1x QD $1 \mathrm{M} \mathrm{HNO}_{3}$ |  |
| 2 | cap and agitate |  |
| 3 | collect acid in a waste cup and discard into $\mathrm{HNO}_{3}$ carboy |  |
| 4 | repeat with MQ $\mathrm{H}_{2} \mathrm{O}$, and shake out all droplets |  |
| 5 | a large number are cleaned in advance, store them in a Ziploc bag with an appropriate label |  |

