

Deaeration

Equipment:

Note: basically you need to set up a vacuum source and condensation trap hooked up to a 4-liter vessel.

- 1 - ring stand, with clamp to hold flask for holding 4L volumetric flask
- 2 - 4L volumetric flasks (one for deaerating sample and one for a condensation trap)
- 1 - number 12 rubber stopper
- 1 - refrigerated condensation trap
- 1 - vacuum pump, Welch Duo Seal #1374

Procedure:

- 1) Stir Hot Break “finished” sample and pour all of it into 4-liter flask.
- 2) Stopper the top and apply vacuum. Sample should bubble like crazy - making sure that sample is not sucked into the trap.
- 3) Continue shaking with occasional closing of the vacuum and /or removing of the stopper to briefly to release pressure.
- 4) When a “slapping” sound is heard as you shake the sample in the flask, the sample is sufficiently deaerated, usually the sample boils and no longer bubbles any longer.
- 5) Pour the sample back into its original container (that is washed and thoroughly dried) and proceed to the next sample
- 6) For the next sample, stir as before, but only pour a small amount of sample into the flask to initially “coat” the flask. Throw out what runs off, then empty the remaining sample into the suction flask again. Repeat until all the samples are done.