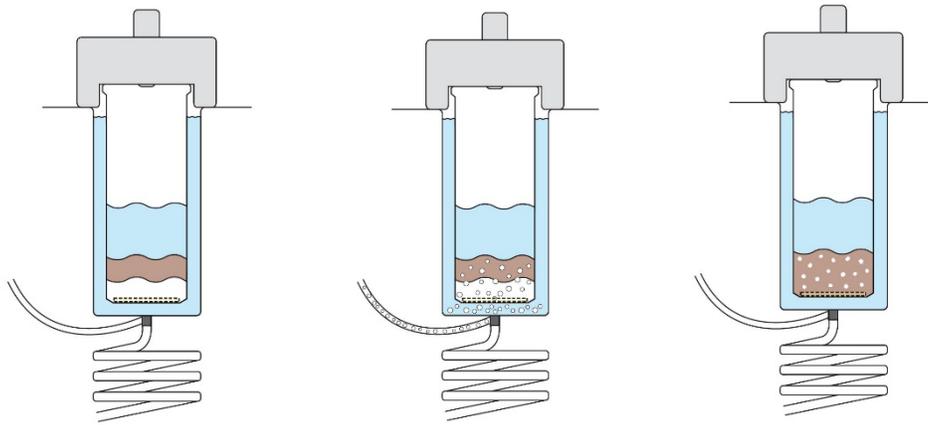


## Agitation User Guide

Agitation can be a helpful tool for small sample sizes that will benefit from gentle mixing. The EDGE adds the solvent as normal and bubbles the solvent and the sample mixture through the bottom of the Q-Cup as shown in the images below. This process helps mix the sample with the solvent and/or sorbent for higher extraction efficiencies. The EDGE will bubble for up to 02:00 mm:ss specified by the method. Then, the heating process will begin shortly after, and the rest of the run will complete as normal. Please contact [molecular.support@cem.com](mailto:molecular.support@cem.com) if you have any questions. Also, if you are unsure if your EDGE system has agitation or you need help with the installation of the agitation feature, refer to page 2.



**Figure 1.** From left to right, these images are before, during and after agitation

### When to use agitation:

- QuEChERS-like extractions
- Samples less than or equal to 10 g
- Samples that will benefit from mixing

### When not to use agitation:

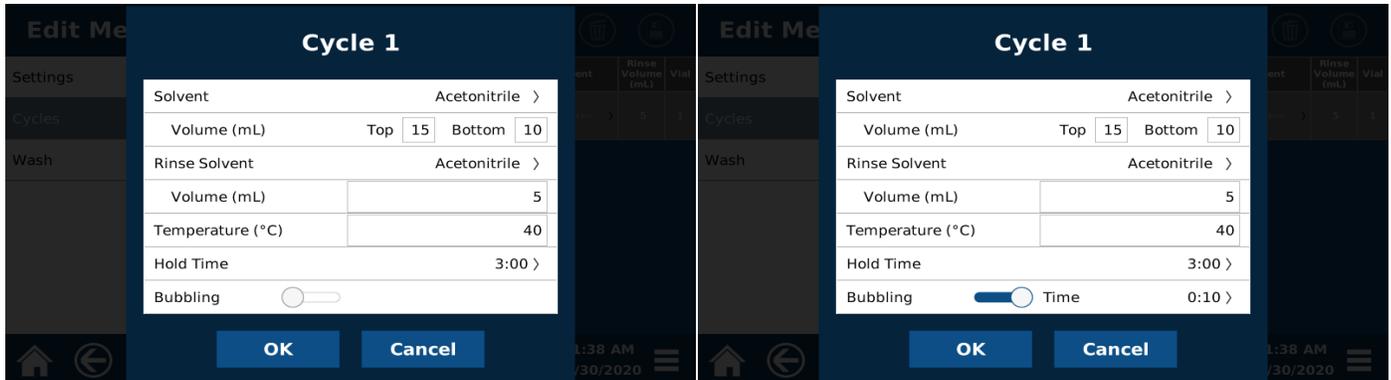
- Polymer samples
- Samples larger than 10 g will not benefit from agitation
- If the method temperature is above the boiling point of the solvent

### Tips

- It is recommended to agitate for a maximum of 02:00 mm:ss
- If using sorbents, always place sorbents below the sample
- If performing a multicycle extraction, only agitate in the first cycle
- It is recommended to use a Q-Screen when using agitation
- Only use with S1 or G1 Q-Disc

## Agitation Setup

- To see if agitation is enabled on your EDGE system, create a method named "test." While in the Cycles tab, select the Pencil and scroll down to the bottom. If there is a bubbling ON/OFF toggle switch, you will be able to create a method with agitation.
- If the EDGE system does not have bubbling and you received a flash drive with the fixup script already downloaded, proceed with step 5.
- If you were not given a flash drive, you should have received the file via email. If you do not have the file, contact [molecular.support@cem.com](mailto:molecular.support@cem.com) for the file and proceed with step 1.



- The EDGE cannot recognize NTFS or Raw file system types. To check your flash drive, insert it into your computer, and right click on it. Select format and you should see a dropdown menu under File system. If either of the file systems previously listed are selected, change to FAT32 or exFAT.
- Create a directory path "/cem/edge/fixup" from the root directory on a USB stick.
- Copy the fixup file to this directory.
- Safely remove the USB stick.
- Power the unit down.
- Insert the USB stick in any of the three USB ports on the unit.
- Make sure this is the only USB stick inserted in the unit.
- Power the unit on.
- When the splash screen appears, watch the progress of the fixup. It is displayed at the bottom of the screen in yellow letters.
- Once you see the "Completed successfully" message, wait for the unit to finish booting. Do not power down the unit before it has finished booting.

If there is a problem, an error message will be displayed for about 10 seconds. **Please note it.**

After the fixup is processed (whether successfully or not), the fixup file will be renamed on the USB stick by adding the ".done" suffix to its name.

If you need to reuse this fixup on a different unit, please restore the original name on the USB stick by removing the ".done" suffix.

All ".done" files on the USB stick are ignored, so you don't have to delete them unless you so desire.