



## **INSTRUCTIONS FOR DEEP WELL 96 MICRO PLATE FILLER**

1. Clean the hood and base assembly with a dilute bleach solution (**do not autoclave**). Alternatively you can clean them by wiping with a 70% solution of isopropanol as long you dry them immediately with a towel.
2. Select the reservoir bottle to be used if not the one we provide. Use the bottle neck adapters provided.
3. Attach and cut the pump inlet tubing so it reaches the bottom of the bottle (see instructions).
4. Place the dispensing wands in a long glass or metal tube to protect them from being twisted or bent while autoclaving (do not place objects on top of wands while autoclaving). Autoclave dispensing wands while attached to the tubing and the dispenser. **Do not autoclave standing upright.**
5. Autoclave media in reservoir bottle or pour sterile media into autoclaved reservoir bottle (see note below on media with particles in it). Practice one time with water.
6. Unscrew wand hold down device and place wands in base using the wand guide pins and alignment holes to locate the wands. Tighten the screw finger tight to secure the wands. (If wands do not align with alignment holes, turn base upside down and adjust alignment blocks screws with the wands in place).
7. Place dispenser into reservoir bottle with media and screw into place.
8. Place an empty Nunc Omni Tray in the plate slider and position under the two wands.
9. Determine the volume of liquid to be dispensed into each well by dividing the number of channels into the volume selected on the dispenser (10ml to 59 ml).
10. Set the desired volume.
11. Raise and lower the plunger rapidly several times to purge the air from the system and to fill the tubing and wands with media. Repeat this until no air comes out the channels. The Omni Tray will catch the media. Although air bubbles may be present in the end of the wands or smaller air bubbles may be present at the top of the wands, these will not be dispensed into the wells after the system is properly purged. If you continue to get air bubbles check for an air leak in the Luer Loks® or dispenser connector.

12. Remove the Omni Tray and replace it with a Deep Well plate.
13. The positioning knob must be in the left or right hole to fill deep to pull the tumble stirrers out of the wells.
14. Hold the positioning knob in your left hand and the dispenser plunger in your right hand. Advance the plate slider until the positioning knob drops into the first positioning indent. Raise up the back of the positioning slider until the channels on the nearest wand are inside the wells, then dispense the media with a smooth yet rapid delivery stroke. (It is important that the channels are close enough to the well walls that the media droplets “touch off” and do not “hang” thereby setting up a siphon.)
15. The plate slider is then lowered and advanced to the next indent and the process repeated. (With a little practice you do not need to use the indents but simply advance the plate visually to the next row of wells.)
16. Repeat this process for as many plates as you need. If you need to refill the media reservoir bottle during the process be sure that if any air gets into the system that it is purged before you start to fill more plates.
17. When you are through filling plates, purge the media with air, (tip the base right to left and use air bubbles to dislodge media. Wash once with a mild detergent and rinse at least 5 times with distilled water while purging with air between rinses.
18. Dismantle the Micro Plate Filler and autoclave the wands, the dispenser with tubing attached and the bottle reservoir. Store sterile and dry.

**Notes:**

If your media has large particulates that may plug the channels, prefilter the media prior to sterilization or filter sterilize the media. Alternatively, placing a sterile prefilter in the dispenser line may also solve the problem.

The channels can be unplugged by reaming with the small wire we provide (in the bag with one of the wands) and flushing the wand.

Clean wands immediately after use. Avoid prolonged soaking in detergent or salt solutions.