

## Needle Cleaning for Organomation Nitrogen Evaporators

\*\*\* CAUTION! BEFORE ATTEMPTING TO CLEAN INSTRUMENT BATH, CAROUSEL OR NEEDLES ALWAYS REMOVE ANY REMAINING SAMPLE VIALS FROM THE INSTRUMENT. DISCONNECT POWER CORD AND ALLOW BATH TO COOL TO AMBIENT TEMPERATURE. WEARING SUITABLE GLOVES AND EYE PROTECTION REMOVE SOILS AND FOREIGN MATERIAL BY GENTLY SCRAPING WITH A PLASTIC OR WOODEN SPATULA. WIPE SURFACERS CLEAN WITH SOFT CLOTH OR PAPER TOWEL SATURATED WITH A SUITABLE SOLVENT. WIPE SURFACES CLEAN OF SOLVENT OR CLEANING COMPOUND RESIDUES WITH A DRY TOWEL. FOLLOW INSTRUMENT INSTRUCTIONS FOR RECHARGING BATH AND CONFIGURING INSTRUMENT FOR USE. \*\*\*

1. Turn off instrument and allow bath to cool if necessary to prevent injury.
2. Wearing gloves to prevent exposure to potentially harmful substances on the needle surface, remove individual the needles by twisting in a clockwise direction.
3. Wipe the exterior surfaces of the needle with a soft cloth or laboratory wipe wetted with acetone, ethanol or THF. This is best accomplished by folding the cloth or wipe in half and placing the needle body between the layers. Grasp the needle body between the thumb and index finger and while applying pressure rotate the needle while simultaneously pulling it through the folder cloth or wipe.
4. Examine the needle and repeat the process if necessary to remove external soils and residues. When external soils and residue have been removed place the needle in a 150 mL beaker with the Luer fitting up or alternatively lay it on a paper towel.
5. Repeat this process until all needles have been externally cleaned.
6. Fill a 150 ml beaker about ½ full with cleaning solution.
7. Mount a needle on a 10 – 20 ml syringe and immerse the tip of the needle in the cleaning solution. Slowly withdraw the syringe plunger to draw the cleaning solution through the needle and into the syringe barrel. When the syringe barrel is about ½ full depress the plunger to dispense the cleaning solution back into the 150 ml beaker. Repeat this procedure 3 or 4 times and then remove the needle and repeat the process with the balance of the needles being cleaned. Discard the used cleaning solution and rinse with tap water and then with deionized water to remove cleaning solution and suspended soils. Fill the beaker about ½ full with deionized water.
8. Rinse the needles with deionized water using a laboratory wash bottle and again lay them on a towel. Empty the syringe and rinse it clear of cleaning solution residues with first tap water and then with deionized water, again using a laboratory wash bottle.

9. Mount a needle on the clean, rinsed syringe and immerse the needle tip in the beaker of deionized water. Following the same procedure as used in step #7 rinse the needle 3 or 4 times and then remove the needle and repeat the process until all of the needles have been rinsed.
10. Dry the needles for 6 to 8 hours in a laboratory drying oven at 105-110 °C or alternatively rinse the needles with acetone, ethanol or THF from a laboratory wash bottle, drain, and dry in a laboratory drying oven at 105-110 °C for 2 to 3 hours.
11. Reinstall the needles on the instrument or seal in a suitable container for storage when not in use.