

Pipette Washer and Dryer

A Pipette Washer and Dryer for Volumetric Pipettes

INTRODUCTION

The new Pipette Washer & Dryer, Part #PIPWASH-1, was designed by Spex CertiPrep chemists to take the hassle out of washing volumetric pipettes.

The Pipette Washer/Dryer is constructed of durable polyethylene. Electricity is only necessary when using the optional Pipette Washer Pump. Also available is a Pipette Washer Basin in which to set the Pipette Washer to catch and recycle the cleaning water. Operation of the Pipette Washer & Dryer is extremely simple and will shorten and simplify the process of cleaning your volumetric pipettes (up to 23 at a time). The washer holds volumetric pipettes sizes 0.5 mL to 250 mL. First, water is run through the pipettes to wash them. Then, air is drawn through the pipettes to dry them. The Spex CertiPrep Pipette Washer is a rectangular plastic unit approximately 3 feet tall and one foot square. The Pipette Washer has a door on the front, which slides upward, permitting access to the inside. The door can be held in the upright position using the plastic plug that fits into the hole located above the door opening.

Inside there is a shelf below the door level containing 23 conical (funnel shaped) plastic pipette holders, which are aligned in 5 rows of 5, 4, 5, 4, and 5 holders respectively. Each pipette holder is connected via plastic tubing to the wash/dry line. The third, fourth and fifth rows of holders are connected through the left on/off valve, while the first and second rows of holders are connected to the right on/off valve. The operator may use two, three or all five rows of pipette holders depending on the number of pipettes to be processed. Tubing extends from the two valves to a single main line, which terminates in a hose barb connector located on the front of the unit just below the on/off valves (see figure on page 2).

OPERATION

Included with the Pipette Washer is a length of tubing. Connect it to your water source, a faucet or the Pipette Washer Pump, then connect the other end to the hose barb connector on the front of the cabinet (see figure on page 2). The hose should press on to the connectors securely, but if either connection leaks, you can use a hose clamp to make the connection tighter. Place the Pipette Washer in a sink or in the Pipette Washer Basin to control and/or recycle runoff from the operation.

Before loading the Pipette Washer with pipettes, close both valves on the front of the Pipette Washer (handles in horizontal position). Place a pipette of any size, tip up, into each pipette holder (see figure on page 2). Start at the back and work forward towards the door. Once all of the pipettes are placed into position, the valves for the rows containing pipettes are then placed in the open position (the valve handles are in the vertical position) (see figure on page 2). Turn the water on. Note the valves located on the front of the Pipette Washer. The valve on the left controls water flow to rows three, four and five (towards the rear of the cabinet). The valve on the right controls water flow to the first and second rows of pipette holders.

When the water source is turned on, water goes through the plastic tubing and then branches into the secondary water lines and fills each pipette. The water then shoots out of the pipette tip, splashes off the ceiling of the washer, and rains a shower of water over the outside of the pipettes, thus cleaning both the inside and outside of the pipettes. Water should be allowed to run through the pipettes for about 10 to 15 minutes to achieve optimum cleanliness.

Once the washing session is complete, shut off the water. The tubing may now be disconnected from the hose barb at the front of the cabinet (or disconnected at the water source if you are going to reuse the same tubing). Attach the plastic tube to vacuum source, if you are using the same tubing you used for the water connection, otherwise, attach tubing from a vacuum source onto the hose barb connector at the front of the cabinet. Once the vacuum source is opened, air is pulled in through the pipettes. Allow this to continue until the insides of all of the pipettes are completely dried by the moving stream of air. Approximate time for drying is 15 minutes.

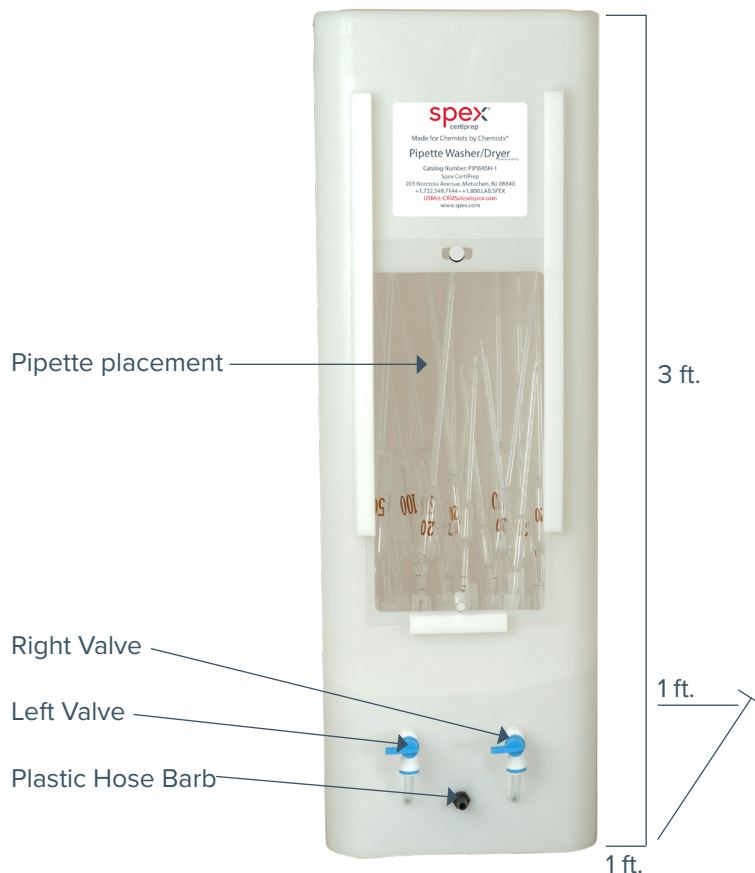
The Pipette Washer has a small footprint, taking a minimum amount of sink, bench or floor space. During the washing of pipettes, it is unnecessary to open or close the door, although we recommend that the door be kept closed during the wash to contain any excess splashing that may occur.

Cycle Time: Under normal use, wash times should run 5-10 minutes, however, your protocol may dictate a longer wash cycle. Drying time should be at least 10 minutes depending on the number of pipettes in the unit and also the size of the pipettes.

You may run detergents through the Pipette Washer/Dryer. Acids may also be used, but be sure to securely close the door to prevent splashing. The durable polyethylene construction is acid resistant. We recommend using room temperature water, but extremely hot or cold temperatures should not adversely affect the Pipette Washer/Dryer. With hot temperatures, the tubing may become soft and pliable.

UNITS AND PARTS

- Pipette Washer/Dryer Part #PIPWASH-1
- Pipette Washer Basin Part #PIPBASIN-1
- Pipette Washer Pump, 115V Part #PIPPUMP-115V
- Pipette Washer Pump, 230V Part #PIPPUMP-230V



TROUBLESHOOTING

If one or more of the pipettes inserted into the Pipette Washer are not being washed, make note of which units are not functioning and turn the water off at the source. Tilt the Pipette Washer Cabinet so as to be able to view the bottom of the unit. Look for any disconnected tubes or loose pipette connectors. If any connections are loose, tighten them slightly. Set the unit back to its upright position and turn the water on again. The unit should now be working properly.

NOTE: If any of the tubing is cracked or broken, remove it. Acquire some similar sized tubing (the tubing inside the unit is standard 1/4" I.D. x 3/8" O.D. plastic tubing) from the lab. Cut a piece of tubing to match the size of the existing tubing currently in use, and re-insert it into the affected area. If you do not have similar sized tubing, call us to order replacement tubing for your unit.

PRODUCT SPECIFICATIONS

Every effort has been made to provide complete and accurate product operation and information in this manual. However, since specifications are subject to change without notice, changes may be made from time to time to improve the performance of the product. Therefore, slight changes that are not reflected in the current illustrations should be considered minor and inconsequential for the purposes of this operating manual.

TO ARRANGE A RETURN SHIPMENT

We want you to be happy with anything you purchase from Spex CertiPrep. Please bring any problem to our attention, but please **DO NOT RETURN** any item before contacting us for a Return Authorization Number and instructions. Unauthorized returns will be refused. Cost for all return transportation is the responsibility of the customer. Credit for returned merchandise will be issued only after goods have been received and inspected. Returned goods are subject to a 25% restocking fee up to a maximum of \$200.00.

QUESTIONS

If you have any questions about the operation of your Pipette Washer and Dryer, please call the Spex CertiPrep Chemical Reference Material (CRM) Division at +1.732.549.7144 or +1.800.LAB.SPEX, extension 444.