

Vacuum Aspirator Collection System Catalog No. F19917-0150

The Scienceware® Vacuum Aspirator Collector and Pump are ideal for easy and continuous vacuum aspiration of a variety of liquids, including tissue culture media, supernatants, and cell washing solutions, from Petri dishes, microtiter plates, flasks, centrifuge tubes, and more.

The 3.8L (1.0 gallon) collection bottle is made of heavy-wall polypropylene and is chemical and corrosion resistant, while the replaceable hydrophobic filter (included) protects the vacuum pump from fluids. The collection bottle rests in the stand above the vacuum pump housing resulting in a neatly organized and compact design that won't crowd the workspace. The lid on the collection bottle contains a safety release vent that prevents vacuum implosion.

Please review these instructions for Assembly and Operation before using this product.

WARNING: When using this product under vacuum, always use standard laboratory precautions.

ASSEMBLY:

- 1. Identify the blue screw cap lid for the collection bottle
- 2. Working on the underside of the lid, unscrew one of the two large compression nut fittings and insert forefinger into the threaded end of the nut to hold the compression fitting in place.
- 3. Identify the 3" length of tubing (i.e. the shortest tubing) amongst the enclosed tubing.
- Insert the flat end of the tubing through the top hole in the nut. Feed the tubing through so that approximately 0.5" of tubing extends beyond the nut. Push compression fitting back into place if needed.
- 5. Screw the compression nut (with the now attached tubing) back in place on the underside of the lid. Hand tightening is sufficient; however, pliers or a wrench may be used. Do not over tighten.
- 6. Working on the topside of the lid, unscrew the compression nut fitting for the same port that you just installed the 3" tubing. Insert forefinger into the threaded end of the nut to hold the compression fitting in place.
- 7. Identify the 39" length of tubing
- (i.e. the longest tubing).
 8. Insert an end of the tubing through the top hole in the nut. Feed the tubing through so that approximately 0.5" of tubing extends beyond the nut. Push compression fitting back into place
- 9. Screw the compression nut (with the now attached tubing) back in place on the topside of the lid. Hand tightening is sufficient; however, pliers or a wrench may be used. Do not over tighten.

- 10. On the topside of the lid, unscrew the other large compression nut fitting. Insert forefinger into the threaded end of the nut to hold the compression fitting in place. NOTE: Do not unscrew the shortest fitting as this contains the vacuum release safety valve.
- 11. Identify the 18" length of tubing (This tube length has a pre-installed luer-lock at one end).
- 12. Insert the free end of this tubing through the top hole in the nut. Feed the tubing through so that approximately 0.5" of tubing extends beyond the nut. Push compression fitting back into place if needed.
- 13. Screw the compression nut (with the now attached tubing) back in place on the topside of the lid. Hand tightening is sufficient; however, pliers or a wrench may be used. Do not over tighten.
- 14. Screw the lid onto the collection bottle and place bottle atop the vacuum pump housing.
- 15. Identify the hydrophobic filter and attach to the luer-lock by screwing the locking tabs on the filter into the luer-lock.
- 16. Press the other end of the hydrophobic filter into place in the small hole located on the vacuum pump housing above the On/Off switch.
- 17. Identify the transformer and power cables. Insert the round jack into the power connection on the rear of the vacuum pump housing.
- 18. Connect the other cable to the transformer 19. Plug the unit into a 120V, grounded outlet.



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OPERATION:

- 20. Insert a Pasteur pipette, regular pipette or a pipettor tip of appropriate diameter into the free end of the aspirator tubing.
- 21 Flip the On/Off switch to the On position (red light will illuminate) and begin your aspiration process.
- 22. When the collection bottle is approximately 2/3 full, flip the On/Off switch to Off position.
- 23. Disconnect the hydrophobic filter from the vacuum pump housing.
- 24. Remove the collection bottle from the vacuum pump housing.
- 25. Unscrew the lid, treat, and dispose of the contents in accordance with all federal, state and local regulations

CAUTION:

The hydrophobic filter protects the vacuum source from fluid contamination. Do not operate the pump without a hydrophobic filter in place as there will be no protection against fluids flowing into the vacuum pump and damaging the pump. Such damage is not covered by the warranty.

Do not allow the collection bottle to overfill as this will cause fluids to flow into the vacuum trap. If fluids overflow the collection bottle and wet the filter it will seal itself and prevent air or liquids from passing through to the pump motor.

The pump will continue to run, but suction at the aspirator tip will cease. Should this happen, it is important that you flip the On/Off switch to Off position to avoid burning out the pump motor. A bag of 12 replacement hydrophobic filters are available under part number F19917-0155.

The vacuum pump housing is made from durable, chemical-resistant polypropylene. It can be wiped with bleach solution or other laboratory disinfectants as needed. All of the supplied tubing is PVC Tubing with a 1/4" I.D. and 3/8" O.D. It can be flushed with bleach solution or other laboratory disinfectants as needed. Autoclaving will turn the clear PVC opaque and may weaken the tubing. The 1.0 gallon collection bottle and compression fittings are made from durable, chemical-resistant polypropylene. They can be wiped with bleach solution or other laboratory disinfectants as needed. Bottle (empty only) and cap may be autoclaved on an as needed



For instructions for HiFlow Vacuum Aspirator Collection System, catalog number F19917-0250, please refer to instruction sheet 919917280 and use filter number F19917-0255.



INSTRUCTIONS



Vacuum Aspirator Collection System – HiFlow Catalog No. F19917-0250

The Scienceware® Vacuum Aspirator Collector and Pump are ideal for easy and continuous vacuum aspiration of a variety of liquids, including tissue culture media, supernatants, and cell washing solutions, from Petri dishes, microtiter plates, flasks, centrifuge tubes, and more. It even works with eight channel tips!

The 3.8L (1.0 gallon) collection bottle is made of heavy-wall polypropylene and is chemical and corrosion resistant, while the replaceable hydrophobic filter (included) protects the vacuum pump from fluids. The collection bottle rests in the stand above the vacuum pump housing resulting in a neatly organized and compact design that won't crowd the workspace. The lid on the collection bottle contains a safety release vent that prevents vacuum implosion. This version also includes labor saving quick disconnect fittings for a quicker change out of bottles.

Please review these instructions for Assembly and Operation before using this product. **WARNING:**When using this product under vacuum, always use standard laboratory precautions. If the equipment is used in a manner not specified by the manufacturer, the protection provided by the equipment may be impaired.

ASSEMBLY:

- 1. Identify the blue screw cap lid for the collection bottle. Screw the lid onto the collection bottle. Place the bottle on the vacuum pump housing.
- Attach the tube with the hydrophobic filter on to the barbed end of one of the quick disconnect fittings.
- 3. Attach the tube from your aspirating device to the other barbed quick disconnect fitting.
- 4. Identify the power cables that will fit your electrical outlet type and insert it into the power supply. Insert the round jack from the power supply into the power connection on the rear of the vacuum pump housing. Do not replace cords with inadequately rated cords.
- Plug the power source into your grounded wall outlet that can be easily accessed and disconnected.

OPERATION:

- 6. Insert a Pasteur pipette, regular pipette, 8 channel pipette or a pipettor tip of appropriate diameter into the free end of the aspirator tubing.
- Flip the On/Off switch to the On position (red light will illuminate) and begin your aspiration process.
- 8. When the collection bottle is approximately 2/3 full, flip the On/Off switch to Off position.
- 9. Disconnect at the quick disconnect fittings to remove tubes from the bottle.
- 10. Remove the collection bottle from the vacuum pump housing.
- 11. Unscrew the lid, treat, and dispose of the contents in accordance with all federal, state and local regulations.

CAUTION

The hydrophobic filter protects the vacuum source from fluid contamination. Do not operate the pump without a hydrophobic filter in place as there will be no protection against fluids flowing into the vacuum pump and damaging the pump. Such damage is not covered by the warranty.

Do not allow the collection bottle to overfill as this will cause fluids to flow into the vacuum trap. If fluids overflow the collection bottle and wet the filter it will seal itself and prevent air or liquids from passing through to the pump motor. The pump will continue to run, but suction at the aspirator tip will cease. Should this happen, it is important that you flip the On/Off switch to Off position to avoid burning out the pump motor. A bag of 6 replacement hydrophobic filters are available under part number F19932-1920. Not for use with flammable liquids.

NOT FOR USE WITH FLAMMABLE LIQUIDS OR MATERIALS

CLEANING:

Treat, and dispose of the contents in accordance with all federal, state and local regulations. The vacuum pump housing is made from durable, chemical-resistant polypropylene. It can be wiped with bleach solution or other laboratory disinfectants as needed. All of the supplied tubing is PVC Tubing with a 1/4" I.D. and 3/8" O.D. It can be flushed with bleach solution or other laboratory disinfectants as needed. Autoclaving is not recommended as it will turn the clear PVC opaque and may weaken the tubing. The 1.0 gallon collection bottle, and quick disconnect fittings are made from durable, homopolymer plastic. They can be wiped with bleach solution or other laboratory disinfectants as needed. Autoclaving is not recommended as it may damage the safety release vent

SAFETY VENT TESTING PROCEDURES:

Periodically test safety release valve by running pump, with an empty bottle, and close off suction hose. After 1-2 minutes you should hear air passing through the valve. This means the valve is working properly. If you do not hear any air passing through the valve, turn off the pump and replace the valve.

Please use appropriate precautionary procedures for chemical or biological materials, wear appropriate personal protective equipment and use under a fume hood if applicable.

Power Supply Input Ratings:

- Supply Voltage: 90-240 Vac
- Frequency: 50-60Hz
- Current: 1.0 Amps

Vacuum Pump Ratings:

- Voltage: DC 12.0+/-1%
- Amperage: 2.6 Amps

For indoor use only Altitude up to 2,000 M

Operating temperatures 5-40 degrees C Max relative humidity 80% to 31 degrees C decreasing linearly to 50% at 40 degrees C

Caution label on bottle:

When under vacuum follow laboratory safety precautions and use appropriate personal protection equipment.



For instructions for standard Vacuum Aspirator Collection System, catalog number F19917-0150, please refer to instruction sheet 919917156 and use filter number F19917-0155.



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INSTRUCTIONS



Replacement Hydrophobic Filters For Vacuum Aspirator Collection System

Not for use with HiFlow model, catalog no. F19917-0250

Catalog No. F19917-0155

These hydrophobic filters are to be used with the Scienceware® Vacuum Aspirator Collection System (Item # F19917-0150) in cases where collection bottle overflow has wet the filter and caused an interruption in vacuum. If you need instructions for the Vacuum Aspirator Collection System, please contact Bel-Art Customer Service at 1-800-423-5278 and ask for a copy of Instruction Sheet # 919917156.

NOTE: The hydrophobic filter protects the vacuum source from fluid contamination. Do not operate the pump without a hydrophobic filter in place as there will be no protection against fluids flowing into the vacuum pump and damaging the pump. Such damage is not covered by the warranty.

INSTRUCTIONS:

REMOVE OLD FILTER:

- 1. Grasp the filter and pull it upwards from the vacuum pump housing.
- 2. Unscrew the filter from the luer-lock contained within the tubing.
- 3. Discard the filter in accordance with all federal, state and local regulations.

INSTALL NEW FILTER:

- **4.** Take one hydrophobic filter from the package and attach to the luer-lock by screwing the locking tabs on the filter into the luer-lock.
- 5. Press the other end of the hydrophobic filter into place in the small hole located on the vacuum pump housing above the On/Off switch.
- **6.** You are now ready to resume normal operation of the Vacuum Aspirator Collection System.

If you need instructions for the Vacuum Aspirator Collection System, please contact Bel-Art Customer Service at 1-800-423-5278 and ask for a copy of Instruction Sheet # 919917156.



INSTRUCTIONS



Replacement Hydrophobic Filters For Vacuum Aspirator Collection System – HiFlow

Not for use with standard model, catalog no. F19917-0150

Catalog No. F19917-0255

For use with the Bel-Art - SP Scienceware® Vacuum Aspirator Collection System - HiFlow (F19917-0250), this hydrophobic filter should be replaced whenever collection bottle overflow has wet the filter and caused an interruption in vacuum.

NOTE: The hydrophobic filter protects the vacuum source from fluid contamination. Do not operate the pump without a hydrophobic filter in place as there will be no protection against fluids flowing into the vacuum pump and damaging the pump. Such damage is not covered by the warranty.



REMOVE OLD FILTER:

- **1.** Grasp the filter and pull it out of each of the two tube ends.
- 2. Discard the filter in accordance with all federal, state and local regulations.

INSTALL NEW FILTER:

- 3. Push each of the two tube ends on the Bel-Art SP Scienceware® Vacuum Aspirator Collection System HIFlow (F19917-0250) on to each of the barbed fittings of the hydrophobic filter. There is no flow direction to be concerned with.
- 4. You are now ready to resume normal operation of the system.

If you need instructions for the Bel-Art - SP Scienceware® Vacuum Aspirator Collection System - HiFlow (F19917-0250), please contact Bel-Art Customer Service at 1-800-423-5278 and ask for a copy of Instruction Sheet # 919917280.



