



Corporate Office
2609 North River Road
Port Allen, LA 70767
225.381.2991
225.381.2996 fax

Anchorage Laboratory
3710 Woodland Dr.
Suite 900
Anchorage, Alaska 99517
907.258.2155
907.258.6634 fax

Fairbanks Service Center
475 Hall Street
Fairbanks, Alaska 99701
907.456.3116
907.456.3125 fax

Mat-Su Service Center
701 E. Parks Highway,
Suite 203
Wasilla, Alaska 99654
907.373.5440

www.amrad.com

A Wholly Owned
Subsidiary of The Aleut
Corporation



www.aleutcorp.com

How to Use a Syringe Filter

Syringe filters are used for a variety of purposes in the field and in the laboratory. These instructions explain how to properly use a syringe filter to reduce instances of sample leakage, filter breakage, or filters coming off the syringe.

1. Open the syringe package and remove the syringe. For dissolved metals, a 60 mL or larger syringe equipped with a Luer-Lok tip is recommended.
2. Filling the syringe and attaching the syringe filter:
 - a. For a limited amount of sample (< 10 mL), draw a small amount of air (about 1 mL) into the syringe before loading the sample solution into the syringe through the tip. Open the syringe filter package and attach the filter securely to the syringe using a clockwise motion. The air is used to purge the filter at the end of the filtration to ensure the minimum amount of sample is left in the filter.
Please use caution when using small volume syringes as they can generate high pressure.
 - b. For larger sample volumes (≥ 10 mL) such as dissolved metal samples, remove the plunger from the syringe. Open the syringe filter package and attach the filter securely to the syringe using a twisting motion. Pour the sample solution from the unpreserved fill bottle into the top of the syringe leaving space for the plunger. Reinsert the plunger.
 - c. To minimize contamination of the syringe filter, the filter can be held in the original packaging while attaching the syringe.
 - d. With a luer slip syringe, secure the filter to the syringe using a clockwise motion. If the syringe has a luer lock, fix it firmly but do not over-tighten.
3. Hold the assembled syringe and filter vertically. Filter the solution into the receiving vessel by gently pressing down on the syringe plunger to push the sample through the filter. Avoid pressing excessively as this could cause the filter housing to burst.
4. If additional sample solution needs to be filtered, remove the syringe filter from the syringe tip followed by the plunger. Reattach the syringe filter as described previously. Pour the sample solution from the fill bottle into the top of the syringe leaving space for the plunger. Reinsert the plunger and continue filtering.
5. If the back pressure increases significantly, change the filter as it may have become clogged.