

CLEAN FILTERS = BETTER DATA

Semrock CLEAN FILTER CHECKLIST



STEP 1 GEAR UP

LET'S GET THOSE FILTERS LOOKING SHARP. HERE'S WHAT YOU'LL NEED:



GLOVES

Unpowdered lab gloves help prevent smudges on the glass and protect your skin from solvents.



SAFETY GLASSES

Cleaning solvents can sting. Don't give them the chance.



CLEAN WORKSPACE

Work in a well-lit, low-dust environment. Static and stray particles can undo a perfect clean.



WIPES & SWABS

Cotton-based swabs or folded lens tissue in various sizes work best. Avoid materials that leave behind lint.



COMPRESSED AIR

Clean, filtered lab compressed nitrogen or air is ideal. Canned air or a rubber bulb blower works too, especially in a low-dust space.



CLEANING SOLVENT

Semrock recommends Isopropyl Alcohol (IPA), Acetone, and HPLC-grade Methanol for most filters. Handle with care, as these aren't your average cleaning fluids.

TIP TRY SOLVENTS TO SEE WHICH PERFORMS BETTER IN YOUR SETUP

! AVOID USING ACETONE OR METHANOL ON EDGE-BLACKENED FILTERS, AS THEY MAY DAMAGE THE COATING



TWEEZERS*

Use non-marring tweezers for safe, clean handling, especially when working outside a filter holder.



FLUID DISPENSER*

A clean dispenser helps you apply solvent precisely without over-saturating your swab or wipe.



DEIONIZED WATER

Useful for certain pre-clean rinses or when avoiding harsher solvents.

TIP AIM AT AN ANGLE, NEVER DIRECTLY AT THE SURFACE

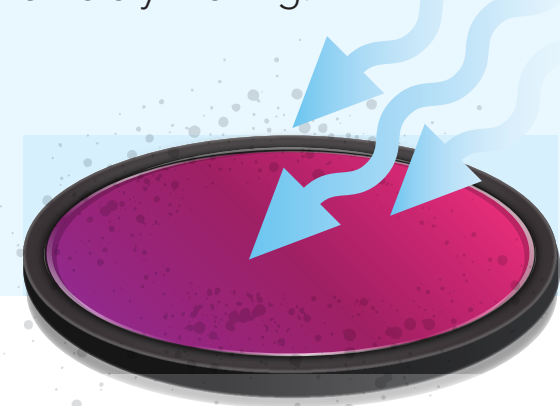
*GEAR OPTIONAL

STEP 2 GENERAL CLEANING

01 BLOW OFF LOOSE PARTICLES JUST LET IT GO

Many contaminants are loosely attached and can be safely removed without touching the surface.

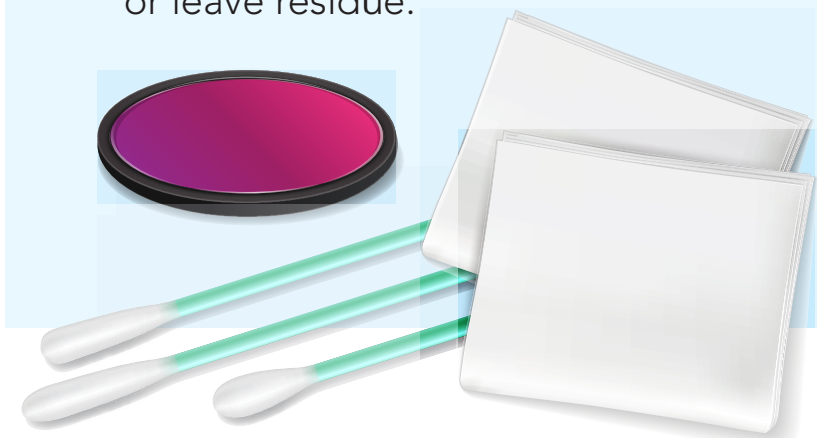
- › Wear gloves and hold the filter carefully in one hand.
- › Start the air stream (moderate flow), angled away from the part.
- › Approach the filter with the air at an oblique angle – never direct.
- › Sweep slowly across the surface, letting the airflow lift debris.
- › Repeat until no more particles are visibly moving.



02 CHOOSE YOUR WIPE OR SWAB GO SOFT OR GO HOME

Some debris may stay behind after air cleaning. If so, it's likely bonded to the surface and needs to be removed with a wipe or swab and solvent.

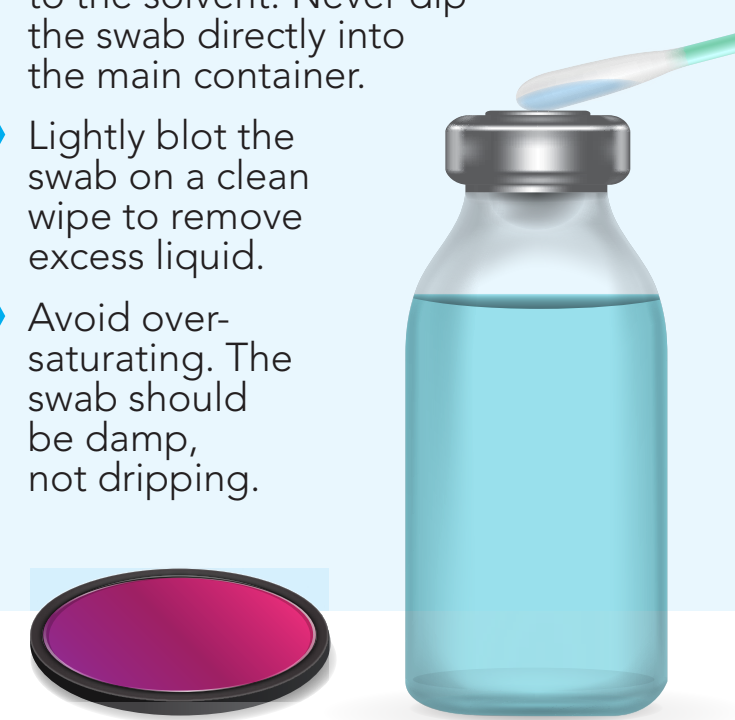
- › Select a wipe or swab that gives you control, fits the filter size, and won't leave behind lint or debris.
- › Use a cotton-based swab or fold lint-free tissue to a firm point.
- › Match the size to your filter for full coverage without dragging.
- › Avoid materials that shed or leave residue.



03 MOISTEN YOUR WIPE OR SWAB JUST A SPLASH

Prepare your swab with just enough solvent to clean the surface effectively.

- › Dispense solvent by pressing the fluid dispenser to release a small amount into the top area.
- › Touch only the tip of the swab to the solvent. Never dip the swab directly into the main container.
- › Lightly blot the swab on a clean wipe to remove excess liquid.
- › Avoid over-saturating. The swab should be damp, not dripping.



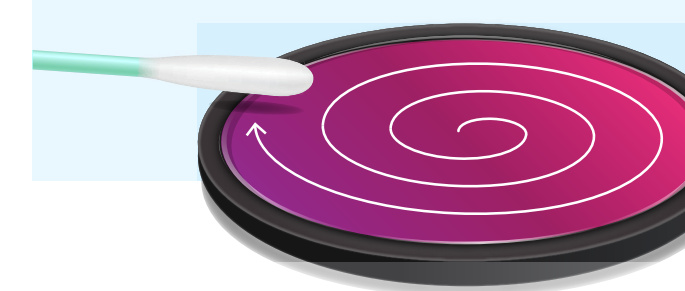
WHY IT MATTERS

Semrock filters are built to last, but even the toughest coatings need care. Keeping them clean protects your imaging quality, data reliability, and equipment lifespan. This poster shows you exactly how to do it.

04 WIPE IN ONE STEADY MOTION SMOOTH & STEADY

Apply gentle, even pressure to wipe in a smooth, continuous motion.

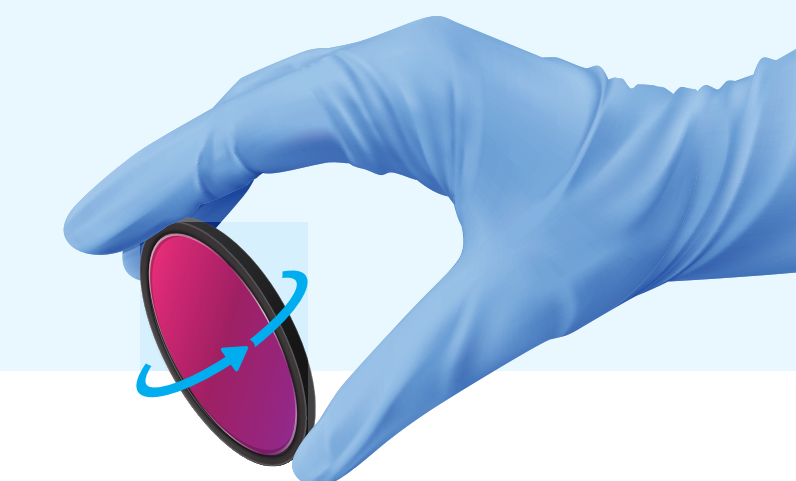
- › Use a spiral or figure-8 motion for round filters, and an S-shaped swipe for rectangular filters.
- › Maintain contact with the surface throughout the motion.
- › Don't stop, scrub, or backtrack mid-wipe to avoid streaks and surface contact errors.
- › Lift the wipe off cleanly at the end of the pattern.



05 INSPECT, FLIP FILTER & REPEAT DON'T GHOST SIDE TWO

Check your work before moving on. Then clean the second side if needed.

- › Use a bright light to check for debris and confirm the optic is clean.
- › Tip, tilt, and rotate the filter, inspecting carefully from every angle.
- › If debris remains, clean the same side again using a fresh wipe or swab.
- › Flip the filter and inspect side two. Only clean if needed, using a fresh wipe or swab. Repeat the same steps.



STUBBORN GUNK? TRY THIS:

- Use a fresh swab or flip to the clean side
- Don't let the deionized water dry before applying methanol
- Lightly touch the swab to deionized water
- For tricky spots, try a different sized swab
- Dab swab on a cleanroom wipe to remove excess moisture
- Repeat: dip in water, blot, wipe, flip swab, then touch swab with methanol and wipe again
- Wipe in an S-shape or spiral motion across the filter surface

DOS & DON'TS: EASY DOES IT

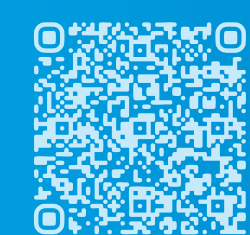
- ✓ Handle filters only by the edges
- ✗ Don't scrub, especially near edges
- ✓ Wipe gently with an S-motion
- ✗ Don't apply heavy pressure
- ✓ Use deionized water and methanol for tough debris
- ✗ Don't reuse dirty wipes or swabs
- ✓ Repeat the process on both sides
- ✗ Don't touch the coated surface without gloves

PRECAUTIONS MIND THE EDGE

SEMROCK EDGE-BLACKENED FILTERS CAN BE CLEANED USING THE STEPS ABOVE, BUT FOLLOW THESE PRECAUTIONS TO AVOID DAMAGE:

- › Use only IPA or water-based cleaning solutions.
- › Avoid acetone, methanol, or harsh chemicals, as they can damage the edge blackening material.
- › Do not wipe aggressively along the blackened edge.

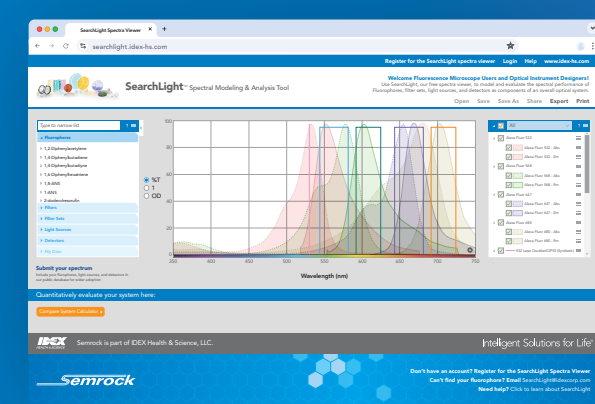
GOT FILTER NEEDS?



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