

Frequently Asked Questions about Home Filtration Systems for PFAS

1) What type of filter should I consider to filter PFAS out of my drinking water?



There is no simple answer to this question. There are many different filters for home water use. The important factor is that the filter is certified by the National Sanitation Foundation (NSF) and the American National Standards Institute (ANSI). A filter can cost as little as \$20 or more than \$1,000 (not including maintenance costs), with variations between types, brands, and whether they are pitcher filters, installed on your faucet, or for your entire home. To date, no one filter fits all solutions. It is recommended that you test your water using a recommended lab¹ before installing a filtration system in your home.

There are two main types of home water treatment:

1. Point-of-use (POU) units treat water at one faucet or one location. Examples include pour-through pitchers or units that attach to a faucet, are part of a refrigerator water/ice dispenser, or are under the sink. POU is a good option for treating only the water you use for drinking and cooking.
2. Point-of-entry (POE) units are installed on the well. POE units treat all the water in your home.

Two common types of filters that remove certain PFAS from drinking water are:

1. Charcoal (Granular Activated Carbon or GAC): These filters use carbon to trap chemicals as water passes through them.
2. Reverse Osmosis (RO) Systems: Reverse osmosis is a process that forces water through an extremely thin barrier that separates chemicals from the water.

Overview of Common Filter Types That Remove PFAS From Drinking Water

Granular Activated Carbon (GAC) Filters	Reverse Osmosis (RO)
<ul style="list-style-type: none"> • Reduces longer chain PFAS (including PFOS and PFOA). • Has a carbon filtration cartridge which captures the contaminants. • Absorption rates reduce notably with shorter chain PFAS such as PFBA and PFBS. • Has cartridges that are rated to treat more gallons of water than those in a RO system and are less expensive to replace. • Are often easier to install than RO systems. • Does not remove minerals from water. 	<ul style="list-style-type: none"> • Reduces the levels of more contaminants in water than a GAC/carbon filter system, including short chain PFAS, arsenic and nitrates. • Typically consists of a sediment filter, carbon filters, and a RO system membrane. • Slows water flow. • Removes minerals from water. Some systems include remineralizers. • Requires more frequent changes of the filtration cartridge and the RO membrane. • Is more costly.

Maintenance is Critical: Filters are only effective if they are maintained according to the manufacturer’s instructions. Follow the manufacturer’s instructions and change the cartridges as often as recommended.

¹ Go to Santa Fe County PFAS Webpage (https://www.santafecountynm.gov/uploads/documents/list_of_laboratories_for_well_testing.pdf) for a list of certified labs.

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2) What should I ask the product supplier/installer about the filters I am inquiring about for home use?



To establish a baseline for selecting a treatment system, ask yourself these questions before contacting a supplier²:

1. What is my budget for a treatment system?
2. Do I need a whole-house (point-of-entry) or a drinking-water-only (point-of-use) treatment system? Point-of-use systems include pitcher or refrigerator filters and under-the-sink units.
3. Are there other contaminants in my water besides PFAS, such as nitrate, arsenic, iron, or manganese?
4. Are there other water-related issues that I'm concerned about such as hardness, taste, and/or odor?

Questions for the manufacturer, supplier, and/or installer:

1. Can I review the manufacturer's performance data sheet* for the treatment system before purchasing it? Performance data sheets should contain the following info:
 - Rated service flow (gallons or liters per minute or day)
 - Rated service cycle = frequency that the filter should be changed (gallons or liters)
 - Manufacturer warranty
 - Operation and maintenance requirements, including the frequency of filter replacement or system service
 - Acknowledgment of third-party testing such as NSF/ANSI and a list of which contaminants were reduced
2. If purchasing a reverse osmosis unit: Is the system certified by NSF/ANSI 58?
3. If purchasing an activated carbon unit: Is the system certified by NSF/ANSI 53?

[Note: if the installer cannot provide a certification for the unit, go directly to the manufacturer and ask to review the performance data sheet so you can be sure that the unit does indeed reduce the contaminants it claims to reduce.]

4. When was the system most recently tested against the applicable NSF/ANSI standard?
5. Which types of PFAS does the treatment system work best for? Short- versus long-chain PFAS or both?
6. Will the treatment unit also work for other drinking water contamination and/or aesthetic issues? (Hardness, other contaminants, taste or odor issues)
7. For activated carbon units: How often do I need to replace the filter?
8. For reverse osmosis units: How often should the unit be serviced?
 - Do I need to call the installer for reverse osmosis service and, if so, what is the cost?

² A. Jochems with the New Mexico Environment Department Drinking Water Bureau.

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3) Who are NSF and ANSI and what does the NSF/ANSI certification tell me?



The National Sanitation Foundation (NSF) is an independent organization that develops standards and conducts product testing, inspection and certification. NSF works with the American National Standards Institute (ANSI) to develop these standards. ANSI is a US based non-profit organization that manages the development of voluntary consensus standards for products, services, techniques, systems, and personnel³. In the context of home water treatment products, NSF/ANSI certification means that the filter has performed to the standards set in the specific certifications. To comply with the standards and meet PFAS certification requirements, a device must⁴:

1. Reduce PFOA, PFOS, PFHxS, PFNA, PFHpA, PFBS, and PFDA concentrations in water below the EPA’s health advisory.
2. Have a reduction claim for one (or many) of the specific PFAS compounds listed above.

Note that companies may state that their products have been tested to NSF standards, but this does not necessarily mean that they have been certified. **When shopping for water filters, it's important to check the packaging for the standard certification name and any claims about specific contaminant reduction.**

NSF/ANSI Standards for Water Treatment Devices at a Glance⁵

Certification*	Description	Reduction Claims by Contaminant	Location of Product**
42 Standard	Certifies products for the reduction of contaminants that may cause negative aesthetic effects, such as taste, odor or color.	Chlorine, manganese, iron, zinc, large particles.	POE, POU
53 Standard	Certifies products for removing or reducing contaminants with a health effect. Health effects standards are set in this standard by the Environmental Protection Agency (EPA).	Lead, chromium, asbestos, volatile organic compounds, certain PFAS	POE and POU
58 Standard	Certifies products that use reverse osmosis technology to remove or reduce certain contaminants that are regulated by the EPA.	Nitrate, lead, arsenic, VOCs, radium, fluoride, certain PFAS	POU Only
401 Standard	Certifies products for reducing contaminants with effects that are not fully researched and are not yet regulated by the EPA.	Pesticides, herbicides, pharmaceuticals	POU and POE

* A product certified for a certain standard **might not be certified for ALL of the contaminants** with that standard. For example, a product may be certified to the NSF/ANSI 58 standard for nitrate, but not PFOA. **Always make sure you match your NSF/ANSI certified product to what is in your water quality test results. Make sure PFAS are listed in the specific reduction claims.** **POU – Point of Use; POE: Point of Entry

³ NSF/ANSI Certifications Explained: https://mytapscore.com/blogs/tips-for-taps/nsf-certifications-explained?srltid=AfmBOopdpC9VhMewsTIH-eLK4NW4bIO_3_VyVBxzo8Qki0fN26qNO5Ng

⁴ Ultimate Guide to PFAS in Drinking Water: <https://mytapscore.com/blogs/tips-for-taps/the-ultimate-guide-to-pfas#section6>

⁵ NSF Standards for Water Treatment: <https://www.nsf.org/consumer-resources/articles/standards-water-treatment-systems>

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4) [Where can I get more information about filtering my water for PFAS?](#)

More Information on Filtration

- Certified units by contaminant type (including PFAO and PFOS): <https://www.nsf.org/consumer-resources/articles/contaminant-reduction-claims-guide>
- Certified unit search: <https://info.nsf.org/Certified/DWTU>
- List of all certified units: <https://info.nsf.org/Certified/DWTU/Listings.asp?hdAllPrds=AllProducts&>
- PFAS: <https://www.nsf.org/knowledge-library/forever-chemicals-advancement-filtration-standards>
- Ultimate Guide to PFAS in Drinking Water: <https://mytapscore.com/blogs/tips-for-taps/the-ultimate-guide-to-pfas#section6>

Abbreviations and Acronyms

AC	activated carbon
ANSI	American National Standards Institute
EPA	United States Environmental Protection Agency
NMED	New Mexico Environment Department
NSF	NSF (formerly National Sanitation Foundation)
PFAS	per- and polyfluoroalkyl substances
PFBS	perfluorobutanesulfonic acid
PFDA	perfluorodecanoic acid
PFHpA	perfluoroheptanoic acid
PFHxS	perfluorohexanesulfonic acid
PFNA	perfluorononanoic acid
PFOA	perfluorooctanoic acid
PFOS	perfluorooctanesulfonic acid
POE	point-of-entry
POU	point-of-use
RO	reverse osmosis
VOC	volatile organic compounds