



# Setting the Standards for Home Water Treatment

While no federal regulations exist for residential water treatment devices, there are several voluntary national standards that establish minimum requirements for the safety and performance of products used to treat home drinking water.

These standards are generally divided according to the technology used by the product. The numbers assigned to each standard reflect the order in which the standards were developed.

Below are the standards and the type of technology each covers, along with a description of the purpose or intended function of the technology.

## **Adsorption/Filtration** (NSF/ANSI 42 & 53)

This process occurs when liquids, gases, dissolved or suspended matter adheres to the surface of, or in the pores of, an adsorbent media.

Carbon filters would be an example of this type of product.

## **Softeners** (NSF/ANSI 44)

These systems incorporate a cation exchange resin that is regenerated with sodium or potassium chloride. The softener reduces calcium and magnesium ions and replaces them with sodium or potassium ions.

## **Ultraviolet Treatment** (NSF/ANSI 55)

These systems use ultraviolet light to disinfect water (Class A systems) or to reduce the amount of nondisease causing bacteria in water (Class B).

## **Reverse Osmosis** (NSF/ANSI 58)

A process that uses reverse pressure to force water through a semi-permeable membrane.

Most reverse osmosis systems incorporate one or more additional filters before or after the membrane.

## **Distillers** (NSF/ANSI 62)

These systems heat water to the boiling point, and then collect the water vapor as it condenses, leaving behind contaminants such as heavy metals. Some contaminants that convert readily into gases, such as volatile organic chemicals, can carry over with the water vapor.

## **Shower Filters** (NSF/ANSI 177)

These products attach directly to the pipe just in front of the homeowner's showerhead.

Keep in mind that claims of being certified to an NSF/ANSI standard do not mean that a product will be able to effectively reduce a specific contaminant. As a result, it's important to verify that the product is certified under that standard for reduction of the specific impurities of most concern to your family.

For additional tips, contact the NSF Consumer Affairs Office at [info@nsf.org](mailto:info@nsf.org) or download our [Drinking Water fact kit](#).

*NSF International is an independent, not-for-profit public health organization that certifies products and writes standards for food, water and consumer goods. NSF has a 65-year history of protecting public health, safety and environment worldwide.*