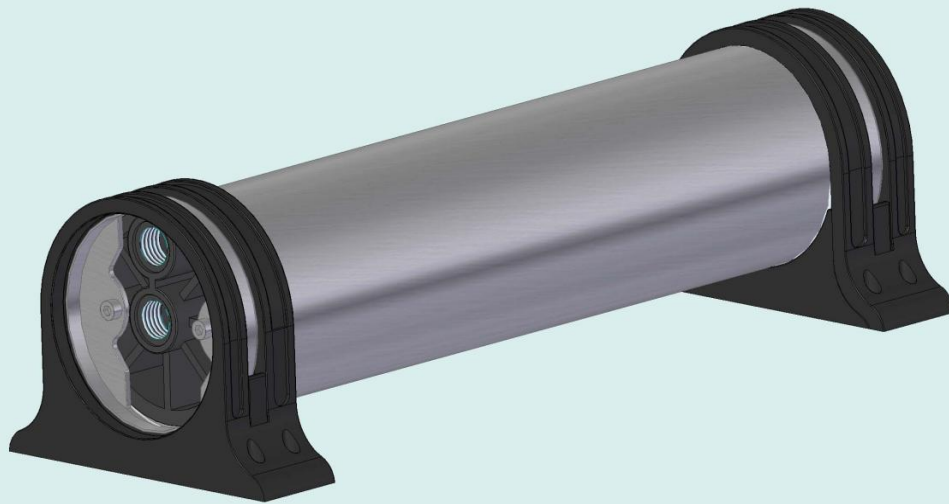


Ceramic UF Membrane Water Purifier

An ideal water purifier for kitchens



Large flux: 1.6GPM (gallon-per-minute) @1bar(14.5psi)

Easy Installation and Maintenance-free

Filtration precision: 0.05Micron

Long Service Life: more than 10 years

Never need filter cartridge replacement in service life

Ceramic membrane materials are FDA-listed according to the CFR Title 21,
paragraph 177-2910

High pressure resistant: 1bar(14.5psi) to 10bar(145psi)

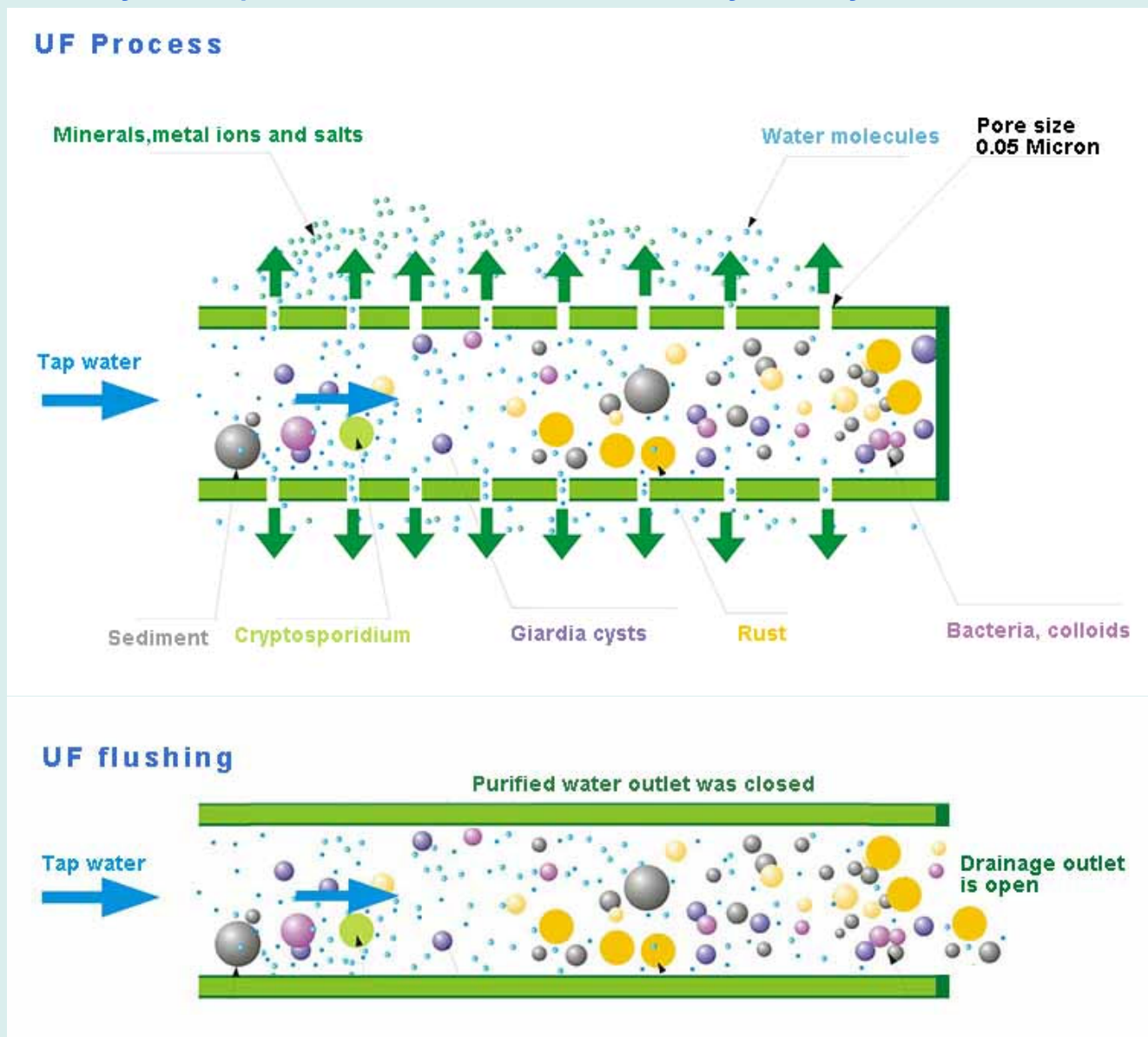
High temperatures resistant: 1°C to 90°C (33°F to 194°F)

Keep mineral substance and micro elements

UF membrane separation technology

Ultrafiltration is a membrane filtration process which uses standard house water pressure to push water through its semi-permeable membrane. Suspended particles and materials of high molecular weight are unable to pass through the 0.05 micron UF ultrafiltration membrane, allowing only fresh clean water and dissolved minerals to pass through.

Historically, the water separation process of ultrafiltration has been used in large municipal water treatment plants and hospitals; however, through advances in technology, it is now available to you as a powerful under-sink water filtration system in your home.



The Ultrafiltration (UF) is a low pressure membrane process that is capable of removing viruses, bacteria, as well as fine suspensions from your drinking water. The UF membrane also has a high chemical resistance to oxidants and chlorine, compared to a TFC RO membrane which cannot tolerate any chlorine. Ultrafiltration treatment is capable of running at low water pressures and does not require a separate water holding tank, and does not require electricity.

Advantages of Ceramic UF water purifier

1. Filter cartridge is ultrafiltration membrane, whose filtration precision is 0.05 micron. It can remove the harmful substance from the water, such as mud, sand, rust, colloid, bacteria, virus and so on.
2. Keep mineral substance and microelement which is beneficial to human body.
3. Advanced cross-flow filtration design can ensure more than 10 years service life.
4. The flux is large enough to meet the family life demand.
5. Save energy, not need to add pressure and electricity, and zero waste water.
6. Pure physical filtration, not add any chemical substance.
7. Ceramic UF can adequately remove the heavy metal and chlorine from the water.
8. It can be installed in the cabinet, save the room.

Comparison of Ceramic UF and Polymeric UF water purifier

Item	Ceramic UF	Polymeric UF
Reliability	excellent	fair
Cost	expensive	cheap
Operation cost	No (tap water)	No(tap water)
Maintenance cost	Very low	middle
Service life	10+ years	1-3 years

Conclusion: It seems that the only disadvantage of ceramic UF is the expensive price, but considers the long service life without replacement, the actual cost of ceramic UF per year may be the lower one. If also consider of the capacity, the actual cost of ceramic UF will be definitely the lower one, because there is no capacity limited due to life and reliability.

How to choose a Household Water Filter

In fact, if we choose water purifiers according to our own or local water quality conditions, we will not fall into a difficult choice dilemma or making an improper choice.

First of all, according to the water quality of our own home or local area, they are roughly divided into the following categories:

1. The water quality is very good, fully in line with the national drinking water standards (or WHO related standards);
2. The water quality is still good, except for a few parameters, basically in line with the national drinking water standards (or WHO related standards), and these parameters exceed the standard is not serious;
3. The water quality is poor, a number of parameters exceed the standard, and exceeds the standard to a certain extent;
4. The water quality is extremely poor and it is in a heavily polluted area.

Make the following selections for each category:

1. No water purifier is required, or an UF water purifier is selected to prevent unexpected situations;
2. UF water purifier;
3. According to the specific type of pollution: (1), heavy metal pollution areas or mineralized high salt areas, RO water purifier should be chosen (with adequately re-mineralized post-treatment); (2) Chlorine in areas with serious fluoride or pesticide residues, UF water purifier and activated carbon combination should be chosen; (3) Others, an UF water purifier should be chosen.
4. In this situation, problem will not be solved by a water purifier, no matter what kind of water purifier is used; its cost will be super high.

Why RO is not first choice as Household Water Filter

First, the PH value range of the national drinking water standards (or WHO related standards) is 6-8.5, moreover, weakly alkaline (7-8.5) water is more recommended for drinking. The PH value of RO water, and distilled water is often less than 6 (not the theoretically value of 7), which means the RO water is not fully in line with the national drinking water standards (or WHO related standards);

Second, RO water is desalinated water, the mineral content is extremely low, especially calcium and magnesium, which are essential to human health.

(Calcium and magnesium in drinking-water: Public health significance

Edited by J. Cotruvo and J. Bartram

Published in 2009 by the World Health Organization

http://whqlibdoc.who.int/publications/2009/9789241563550_eng.pdf)

Third, health risks from long-term drinking of desalinated water such as RO water should not be dismissed.

(Nutrients in Drinking Water: chapt12. HEALTH RISKS FROM DRINKING DEMINERALISED WATER

Edited by Frantisek Kozisek

Published in 2005 by the World Health Organization

<https://www.who.int/publications/i/item/9241593989>,
<https://apps.who.int/iris/rest/bitstreams/51499/retrieve>)