



FILT'RAY^{2G} disposable water filters

USER MANUAL ENGLISH VERSION

POINT-OF-USE FILTERS

14, 31 & 62 days and 3 & 4 months

Shower head, faucet, inline and wall-mounted shower filters

REFERENCES

AT030711, AT030713, AT030715, AT030717, AT030718, AT030719, AT030720, AT030721, AT030722, AT030723, AT030724, AT030725, AT030727, AT030728, AT030729, AT030730, AT030731, AT030732, AT030733, AT030734, AT030739, AT030740, AT030741, AT030742, AT030743, AT030744, AT030767, AT030768

Shower head, faucet, inline and wall-mounted shower filters

General specifications

- Disposable **non-sterile and sterile** filters
- Effective against **waterborne pathogens** for up to **31 & 62 days and 3 & 4 months**

FILT'RAY^{2G} disposable water filters provide microfiltration technology using sterilizing-grade tubular membranes. The fixed 0.1 µm pore size ensures **high performance filtration** while delivering a **comfortable flow rate** for users.

To guarantee the optimal performance of the FILT'RAY^{2G} disposable water filters, please ensure that you follow the instructions for installation (see I.) and read the warnings carefully (see II.).

FILT'RAY^{2G} disposable water filters are designed to ensure water safety at points of use. They are recommended for managing biological risk and preventing bacterial infection.

31 & 62 day and 3 & 4 month FILT'RAY^{2G} disposable water filters provide a barrier against waterborne microorganisms (aerobic flora that grow at 22°C to 36°C, *Pseudomonas aeruginosa*, *Legionella pneumophila*, etc.). These filters are designed to help control environmental conditions and are used to protect users against waterborne pathogens.

Laboratory-based microbiological challenges of *Brevundimonas diminuta*, *Legionella pneumophila* and *Pseudomonas aeruginosa* guarantee a **7 log retention capacity** for all waterborne microorganisms larger than 0.2 µm (2).

I. INSTALLATION INSTRUCTIONS

Warnings

- Filters installation must conform with professional **asepsis regulations**. Hands must be disinfected prior to installation. Inappropriate installation may result in a source of contamination or carry-over contamination.
- The shower head filter (screw-on) features a standard fitting, and can therefore be connected to all flexible shower hoses.
- The faucet and wall-mounted shower filters can be connected to most plumbing fixtures using an adaptor (clip-on); contact us for a list of available adaptors.

- Installation of the inline filter requires the use of rapid connectors and/or connector nozzles, contact us for a list of available adaptors.
- Make sure that the individual unit packaging (plastic bag) is not punctured or torn and that the filter is not damaged. If this is the case, do not use the device, as the performance can no longer be ensured.

Installation

1. Turn off the water supply.
2. Remove the used filter or the original shower head (for first-time installation of a shower head filter) or fit the adaptor, if needed (for first-time installation of a faucet filter) (see removal, below).
3. Open the individual unit packaging (bag) partway, making sure that the filter remains inside the bag. **Do not touch the open end of the tap or the shower head with your fingers.**
4. Keeping the filter in the bag, screw it onto the end of the hose (shower head filter) or clip it on (faucet or wall-mounted shower filter) or clip the filter inlet to the adaptor in the direction of the arrow indicating water flow on the tag (inline filter).
5. The bag can then be removed.
6. Turn the water on for a few seconds to check that the adaptor(s) and the filter are **perfectly watertight**. In the case of leaks, repeat the installation procedure, using a new filter, if needed.

Removal

1. Turn off the water supply.
2. Remove the used filter by unscrewing it from the end of the hose (shower head filter) or unclipping it from the adaptor (faucet, wall-mounted shower and inline filters).
3. Dispose of the used filter according to your institution's established procedures.

Waste management

Used FILT'RAY^{2G} disposable water filters do not present any special infectious risk. They are classified as normal household waste. Nevertheless, we recommend that all non-recyclable plastic products be disposed of responsibly via ecological collection and treatment facilities (1).

Maintenance

To facilitate the tracking of maintenance procedures, a removable adhesive label (located on the filtration device) can be used to record important information for your safety records (date of installation, date of removal, filter unique identification number, etc.). This information can also be automatically recorded on the FILT'RAY Datamanager extranet platform using a bar-code reader (1).

II. WARNINGS

- FILT'RAY^{2G} disposable water filters must not under any circumstances be used to produce water for **pharmaceutical purposes** (i.e., water that will be used in solutions intended to be administered orally, injected, or perfused).
- FILT'RAY^{2G} disposable water filters are single-use (disposable). They cannot be sterilized or re-installed on another faucet.
- Be sure to comply with the **maximum usage period** of the FILT'RAY^{2G} disposable water filters and the **expiration date** indicated on the label.
- The risk of transferring microorganisms from the filter to the user is minimal, due to the presence of a bacteriostatic agent in the filter (see IV.). Nevertheless, unregulated usage and environments can create a source of **carry-over contamination**. Please ensure that FILT'RAY^{2G} disposable water filters :
 - do not come into direct contact with germ sources (dirty skin or hands, feces...)
 - are not struck or dropped. Filter performance is not guaranteed if the filter casing is physically damaged. Do not attempt to open the device.
 - FILT'RAY^{2G} shower head filters must always be replaced in the wall-mounted bracket after use, and cleaned and disinfected regularly in compliance with institutional safety procedures, avoiding contact with the shower head outlet at all times. They must not be unscrewed at any point during the period of use, except for when the water supply network is disinfected (at which time a new filter must be installed).
 - FILT'RAY^{2G} faucet, wall-mounted shower and inline filters must be regularly cleaned and disinfected in compliance with institutional safety procedures, avoiding contact with the faucet outlet at all times. They must not be unclipped at any point during the period of use, except for when the water supply network is disinfected (at which time a new filter must be installed).

III. TECHNICAL SPECIFICATIONS

Conditions for use

The performance of FILT'RAY^{2G} disposable water filters is guaranteed when the water pressure and temperature remain between 14.5 and 72.5 PSI and 41°F and 140°F, respectively. Flow rates measured under normal conditions are as follows:

		FILT'RAY ^{2G} shower head filter	FILT'RAY ^{2G} faucet and inline filter *	FILT'RAY ^{2G} wall-mounted filter
		Flow rate (gal/min)		
Water pressure (PSI)	14.5	1	0.52	0.79
	29	2.11	1	2.11
	43.5	2.9	1.6	3.4
	58	3.7	1.8	4.2
	72.5	4.2	2.1	5

*low flow rate faucet filters

Heat and chemical resistance

FILT'RAY^{2G} disposable water filters are resistant to the thermal and chemical shocks that frequently occur during disinfection of the water supply system (2). They remain effective after treatment at **70°C (158°F) for 30 min** (cumulative maximum) or a dose of active chlorine at **100 ppm for 60 min** (cumulative monthly maximum: FILT'RAY^{2G} 31 day filters: 1 hour at 100ppm, FILT'RAY^{2G} 62 day filters: 2 hours at 100ppm, FILT'RAY^{2G} 3 month filters: 3 hours at 100ppm and FILT'RAY^{2G} 4 month filters: 4 hours at 100ppm).

Blockage tolerance

FILT'RAY^{2G} disposable water filters have a certain amount of tolerance to blockage due to **the membrane's self-cleaning system Bubl'AirWash™**.

Nevertheless, the flow rate at the point of use may decrease somewhat before the end of lifetime if there are unusually high levels of particles or suspended microorganisms in the water supply (for example, after a maintenance procedure has been performed). If the flow rate becomes too slow for user comfort, simply replace the filter.

IV. PRODUCT COMPLIANCE

Sterile FILT'RAY^{2G} disposable water filters:

- are sterilized by gamma irradiation in compliance with norm NF EN ISO 11137. Do not resterilize.

Sterile and non-sterile FILT'RAY^{2G} disposable water filters:

- contain a **bacteriostatic agent** to prevent the risk of carry-over contamination. Laboratory-based microbiological testing for *Escherichia coli*, methicillin-resistant *Staphylococcus aureus* (MRSA), *Legionella* sp., and *Pseudomonas aeruginosa* guarantees the retention of more than 98% of bacteria (2);
- have received worldwide drinking water compliance certifications (ACS-France, KTW-Germany, WRAS-United Kingdom*);
- meet the requirement of the Australian/New Zealand Standards AS/NZS 3497 « Drinking water treatment units » and AS/NZS 4348 « Water supply - Domestic type water treatment appliances - Performance requirements » for the class II(a) : microbiological treatment - bacteria removal. Certification and WaterMark marking. For more information please refer to the performance data sheet – available upon request;
- comply with many additional international standards for safety and quality: the American FDA, the European Pharmacopoeia, NF EN ISO 13485, etc. (1)

V. MANUFACTURING INFORMATION

FILT'RAY^{2G} disposable water filters are manufactured in France and distributed by:

aqua-tools
50 Milk Street, 16th floor
Boston, MA 02109

(1) For more information, visit our website at: www.aqua-tools.com
or contact us:
Phone : 617-398-2497
E-mail: contact@aqua-tools.com

(2) For the results of the laboratory testing, see the “Scientific and Technical Validation Guide” for the relevant product. Document available upon request.

* In progress

Product label – meaning of symbols

	Compliant with the Essential Requirements
	Non-sterile
	Compliant with the Essential Requirements - Sterile
	Sterilised using irradiation
	Do not resterilize
	Catalogue number
	Batch code
	Use by
	Consult instructions for use
	Manufacturer
	Free of natural latex
	Do not use if package is damaged
	WaterMark marking : License number for AS/NZS 3497 compliance by CertMark