



KT Corporation

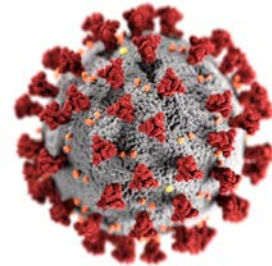


Gravity Flow Filters



Electrokinetic Nanofiber Composite
Fusion Filters

FUSION FILTER: FEATURES AND BENEFITS



A Bigger Picture

We want everyone in the world, no matter what their economic circumstances, to be able to afford FUSION FILTERS and obtain the benefits of pristine water. Millions of people die each year as a result of microbiologically contaminated water and most of these casualties are children under the age of five. Many people suffer from a lack of pure water even when living in cities where water treatment should be available. Consumers demand pristine water they can trust and FUSION FILTERS put control of water quality back in the hands of the people who need it the most. FUSION FILTERS are a personal chemical and biological protection system. They can produce sufficient water to support a family of six for a full month, including not just drinking water, but sufficient water to support cooking, cleaning, hand washing, and other critical chores. FUSION FILTERS are a stepping stone technology to a better and healthier life.



Fusion Filters are designed to intercept all microbiological threats, including bacteria, viruses, parasites, and oocysts and are tested under NSF P231 to intercept >99.9999% of bacteria, >99.99% of virus and >99.95% of 3 micron fluorescent microspheres (oocyst simulant). In addition, Fusion Filters intercept even the smallest known bacterium; *Brevindimonas diminuta*, which is only 0.25 microns in diameter compared to the roughly 1.0 micron size of *Klebsiella terrigena* used in the NSF protocol. Even this tiny organism is removed at 99.9999% by the Fusion FF-1 filter.

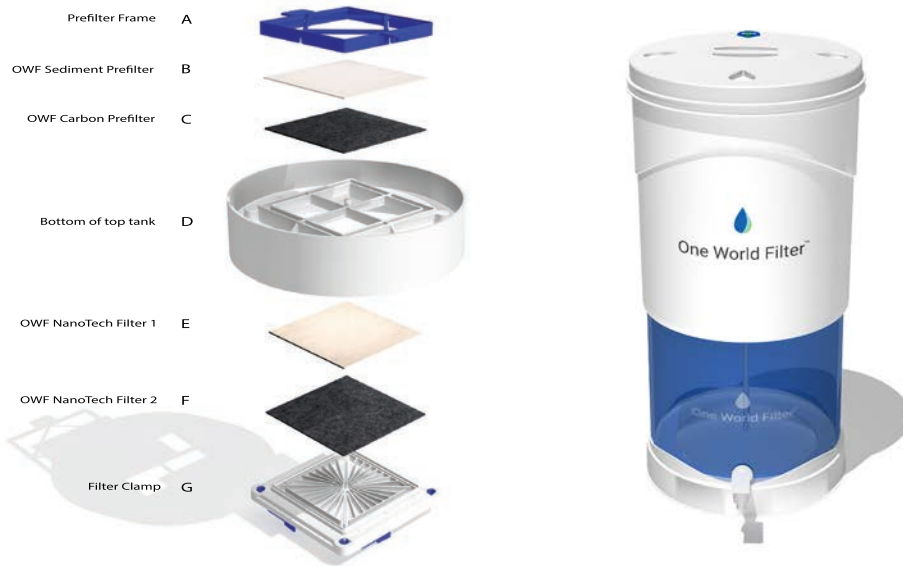


FUSION FILTERS from KT Corporation are distributed to charitable organizations and sold for use by low-income households by the ONE WORLD FILTER FOUNDATION.

YOUR WATER IS NOT JUST PURE... *IT'S PRISTINE!*

The common filter term "CTO" (Chlorine Taste and Odor) was coined by the inventor of the FUSION FILTER in 1990. Now, FUSION FILTERS makes CTO devices completely obsolete.

Introducing the "STOCC" (Sulfide, Turbidity/Taste, Odor, Chlorine, and Chloramine) filter. While CTO filters remove chlorine, the FUSION STOCC filter handles every type of aesthetic problem, meeting NSF STD 42 requirements for the life of the filter. Whether using municipal water containing either chlorine or chloramine, well water contaminated with nasty smelling and tasting hydrogen sulfide, surface water having a musty taste from vegetation, or water loaded with rust, particulates, sediment and dirt – it doesn't matter!



The unique element of these filters is that they include only a piece of filter paper and have no plastics, rubber seals, or injection molded components. The filter clamp engages with the self-gasketing filter medium, forming a seal more than 99.99999% secure. There is minimal solid waste, and FUSION FILTERS are 75% manufactured from all natural ingredients (coconuts and wood chips).

FUSION STOCC filters are the smallest, most powerful, devices to ever handle the full range of aesthetic challenges.



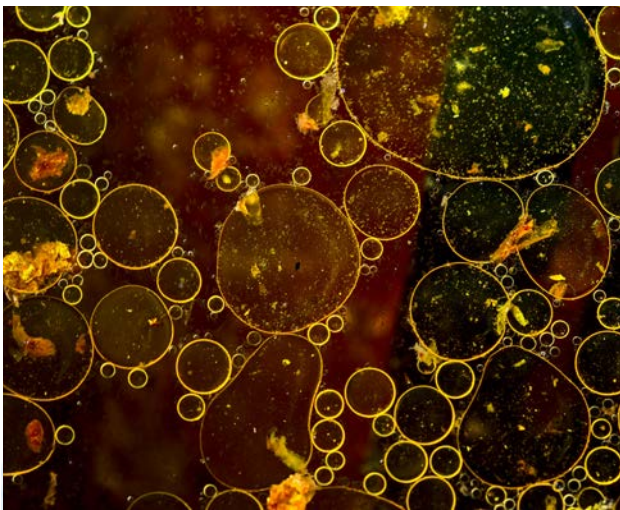
UNPRECEDENTED

“THE MOST POWERFUL FILTER EVER MADE...”

FUSION FILTER IS A GRAVITY FLOW DEVICE THAT PASSES 28 NSF STANDARD TESTS,
MORE THAN ANY OTHER FILTER ON THE MARKET...

NSF STD P231

Microbiological Threats



Bacteria Testing

(IAPMO Report # 16974/19-20)

Filters challenged with *Klebsiella terrigena* in Test Water #1 (general test water) and in test water #3 (Challenge test water, high-pH, high organic carbon, high turbidity, high TDS, low temperature). Filters provided > 99.99999% reduction of these bacteria throughout the life of the filter.

Supplemental Bacteria Testing

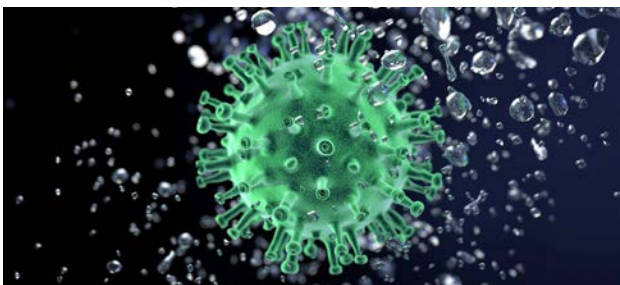
(ASI Report # 56627)

Filters challenged with *Brevindimonas diminuta* in Test Water #1 (general test water). *B. diminuta* is the smallest bacterium known and is used for testing filters in the pharmaceutical industry. It is a more effective penetrating organism than *B. terrigena*. Fusion Filters provided > 99.99996% reduction of *B. diminuta* throughout the life of the filter.

Oocyst Testing

(IAPMO Report # 16974/19-20)

Filters challenged with fluorescent micro-spheres of 3 micron diameter in Test Water #1 (general test water) and in test water #3 (Challenge test water, high-pH, high organic carbon, high turbidity, high TDS, low temperature). Filters provided > 99.999% reduction of these particles throughout the life of the filter.



Virus Testing

(ASI Report # 56027)

Filters challenged with MS2 bacteriophage (25 nanometer diameter and smaller than the smallest enteric virus -- Polio) in Test Water #1 (general test water). Filters provided > 99.999% reduction of these viral particles throughout the life of the filter.

PERFORMANCE

USING JUST A TEASPOON OF CARBON™.

NSF STD 53

Metals and Asbestos

Asbestos Reduction

(IAPMO/QFT Report # 19-1196-Asbestos)

> 99.999% reduction of asbestos fibers when challenged with an average of 16,000,000 fibers/liter

***Mercury Reduction**

(KTC Data)

> 90% reduction of influent mercury of 6 ppb at both high and low pH. No detection of mercury throughout the life of the filter.

***Lead Reduction**

(KTC Data)

> 95% reduction of soluble and insoluble lead when challenged with 150 ppb influent concentration at both high and low pH. No detection of lead throughout life of filter.

***Cadmium Reduction**

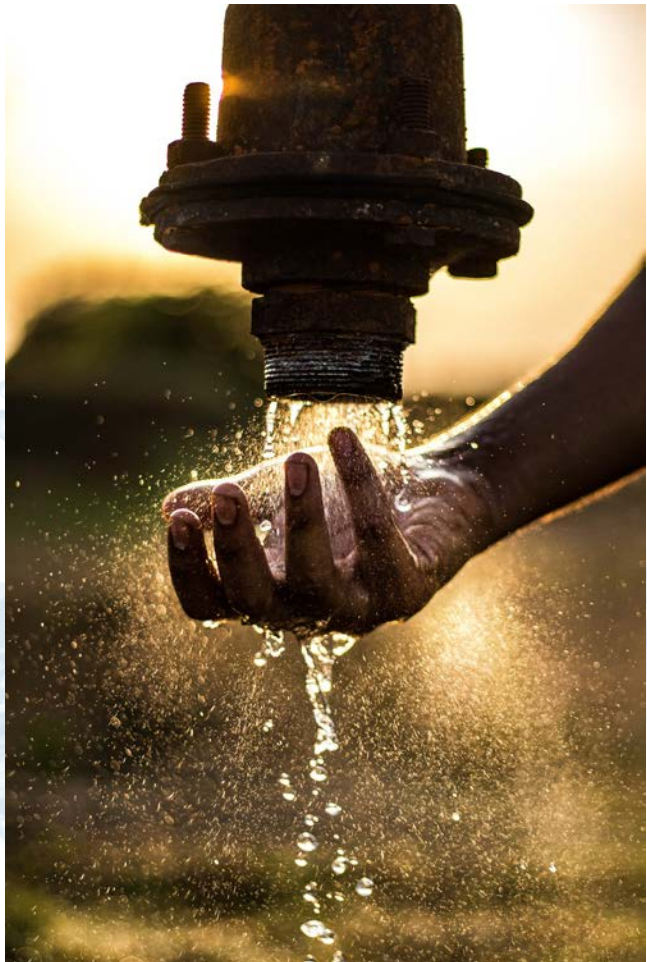
(KTC Data)

> 90% reduction of 30 ppb influent mercury at both high and low pH. No detection of cadmium throughout the life of the filter.

***Antimony Reduction**

(KTC Data)

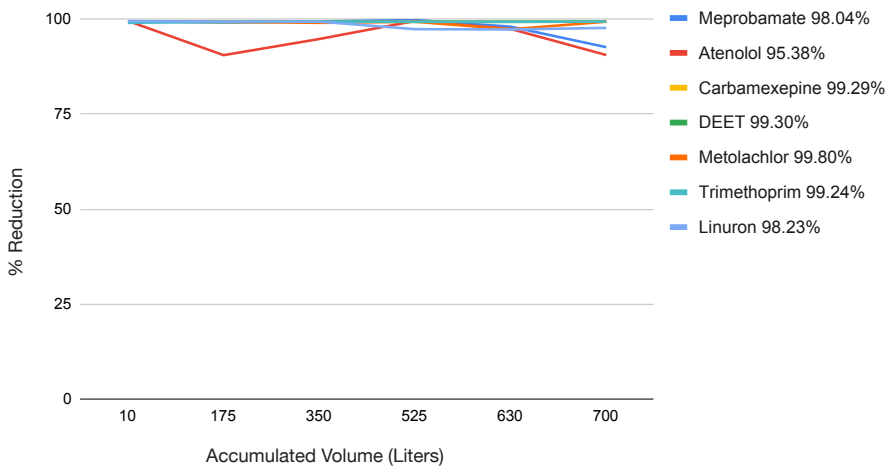
> 90% reduction of 50 ppm influent antimony at both high and low pH. No detection of antimony throughout the life of the filter.



NSF STD 401

Organic Contaminants

GROUP 1

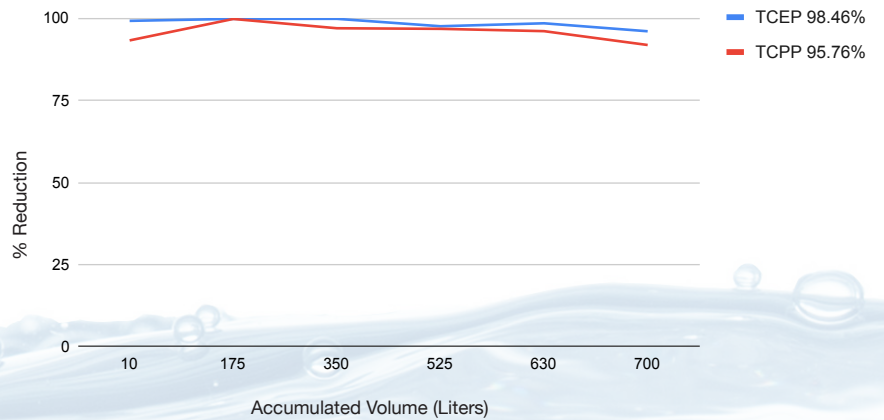


Organics Reduction

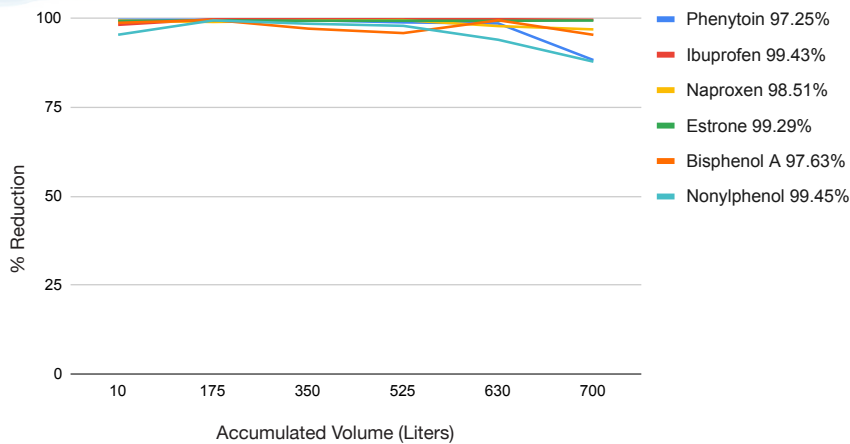
(IAPMO/QFT Report # 19-1196-EC)

NSF STD 401 examines the filter's reduction of a broad spectrum of organic chemicals, including pesticides, herbicides, pharmaceuticals, and industrial chemicals. The filters are challenged with blends of these chemicals in three groups. Lab results demonstrated that every single compound in the NSF STD 401 list is effectively intercepted for the life of the filter (700 Liters) without exception.

GROUP 2



GROUP 3



NSF STD 42 Aesthetic Purity

Welcome to the new standard in taste and purity -- **STOCC!**

Today's filters only have the capacity to address three water quality aesthetics.

Chlorine, Taste, and Odor.

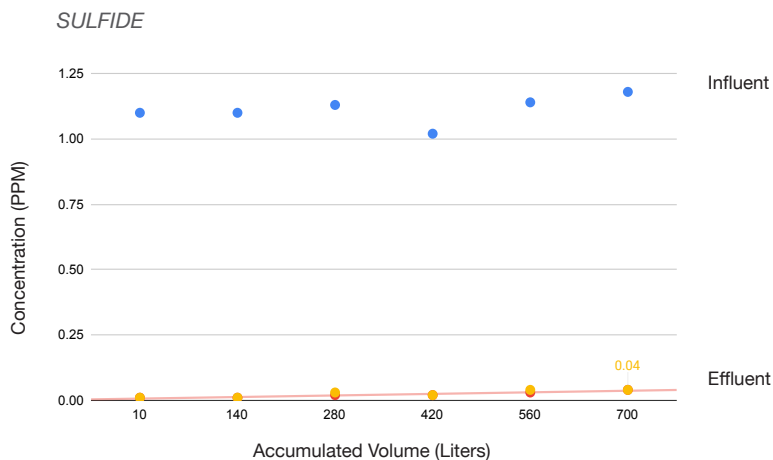
Fusion Filters are a new class of filter. They are "**STOCC**" filters. The new benchmark filter to simultaneously meet NSF STD 42 -- requirements for

Sulfide, Turbidity/Taste, Odor, Chlorine, and Chloramine.

Sulfide Reduction

(IAPMO/QFT Report # 20-412-Sulfide)

Where other filters stop, the Fusion Filter starts. It contains only 4-grams of catalytic activated carbon and easily passes this 185-gallon (700 liter) sulfide reduction test. It is the smallest and most compact filter to have demonstrated capacity to remove this foul smelling and tasting contaminant that is usually encountered in well water. The average performance during the test was 97.8% reduction and all data points passed the NSF STD performance criterion of 95% reduction.



Turbidity Reduction

(IAPMO/BCS Report # 1912107)

Two Fusion Filters were tested with an average influent particle count of 1,200,000 particles/ml. Average measured particle reduction for the filters was 96.8% during the initial measurement and 90.4% during the last measurement, easily passing the NSF STD 42 Class 1 criterion of 85% reduction of 0.5 to 1.0 micron particles.



Chlorine Reduction

(IAPMO/AWRTCL Report # 16571A/19-20-Chlorine)

The filters removed this bad tasting disinfectant below detection throughout their life. Filters were tested at an average influent free chlorine concentration of 2.1 ppm with an average reduction of 97.6%.

Chloramine Reduction

(IAPMO/QFT Report # 20-299-Chloramine)

Fusion Filters were tested after 10 unit volumes and then at each 10% of rated filter life (11 tests for each filter). Challenge concentration of chloramine was 3.00 ppm. The result was an average reduction throughout the tests of 94% with both filters passing the NSF STD 42 criteria (83.3% reduction) at all data points.

