



folia Water

The world's first water filter that
costs pennies, not dollars:
The next \$1B staple



Paper for pennies, water for billions

FOLIA WATER FILTERS



An antimicrobial paper water purifier



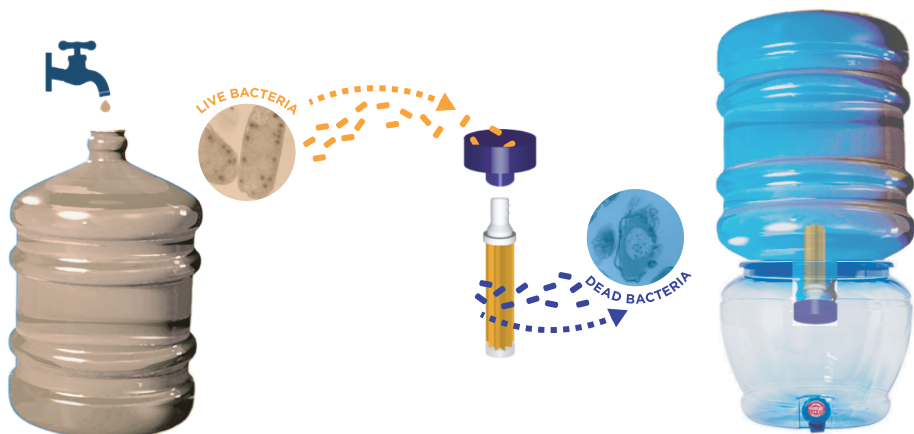
Safe germ-free water



MSRP 20 cents for 20 liters

Folia Water enables parents to gain control over their family's health. With Folia Water Filters, mothers have agency over their access to safe germ-free water, thriving in their role as health officers of the family for a better future





Kills 99.9999% of germs

Applicable to varying water sources:

Tap water, tubewells, and rivers, lakes, and ponds
Not applicable to sea water

Passes WHO criteria for antimicrobial effectiveness, with filter performance based on professional lab testing:

- **Removal %:** 99.9999% for bacteria, 99.999% for viruses, 99.99% for protozoans, 99.8% for iron
- **Flow rate:** 2-3 L/H
- **Removes dirt:** consumers will see clear water
- **Contaminants removed:** Bacteria, Viruses, Protozoa, Dirt, Worms, etc.
- **Contaminants not removed:** Lead, Chlorine, Arsenic, Radioactive
- **Technology:** US provisional and PCT/WIPO Patent:
 Nanosilver-infused paper as antimicrobial filter



FOLIA WATER FUNNEL DESIGN



20¢ FOR 20 LITERS

FLOW RATE: 2-3 L/H

MARKET: BANGLADESH

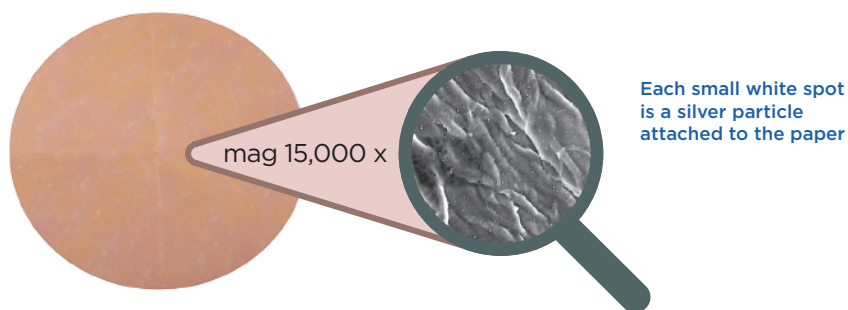
Durable filter housing: Razor-razor blade pricing model, funnel retails for 20¢ or included with the first purchase

User guide

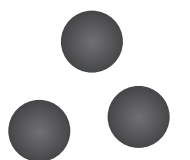


APPLICATIONS & PERFORMANCE

Silver nanoparticle infused paper water filter



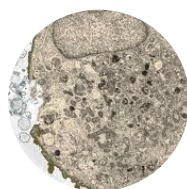
- After filtration, the silver level in the drinking water is under 100 ppb, which meets WHO guidelines



Silver nanoparticles



Releases antimicrobial silver ions



Making cell membranes rupture and denaturing bacteria's metabolic enzymes



Latrines close to wells lead to contaminated water



Folia Water Filters kill germs in water that cause illness

Contaminants Removed by Folia Water Filters

Biological Contaminants

- Target market: Base of the pyramid consumers in emerging countries
- Common disease: Diarrhea
- Source of water: Tubewells and tap water contaminated with (dilute) sewage

Bacteria	Viruses	Protozoa	Dirt	Worms	Iron
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The largest cause of waterborne diseases worldwide

Chemical Contaminants

- Target: Population in heavily industrialized countries/regions
- Common disease: Cancer, Cardiovascular, Iron.

Heavy Metal	Chlorine	Radioactive	Petroleum	Arsenic
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Mostly associated with heavily industrialized regions



	Precautionary Disclaimer	Reason
Storage	Do not store the paper outdoors. Papers should be stored in a bag, cabinet or other indoor location like any other grocery store item	Exposure to sunlight over long periods of time may reduce the antimicrobial effectiveness of the silver in the paper
Product Lifetime	Each Folia Water Filter paper filters 20 liters of water. For an unopened bag, the product lifetime (i.e. shelf life) is 12-months	Customers may not remember how many liters or bottles of water they have used. Also, some customers may overuse the paper. The same problem is true for any water filter.
Unusable Paper	Do not use the paper when paper turns in color or is torn/ripped	Turning white indicates that silver nanoparticles (i.e. antimicrobial agents) are being released

DESIGN PRINCIPLES

The Folia Water Filter is an antimicrobial filter paper that contains silver nanoparticles that kill bacteria and viruses, while the paper's pore size physically filter out dirt and larger parasites

A single filter provides 20L of safe, germ-free water



- Designed to fit existing consumer kitchen habits
- Folia Water's funnel design works with any common household water container, such as soda and water bottles
- Folia Water's cartridge design fits in the neck of a 20L water bottle



- Paper is a natural, renewable, biodegradable material
- Folia sources paper from certified sustainable forests



- No heat required
- No pump required
- No electricity required



- Paper is lightweight and easy to carry



- Minimizes consumer behavior change
- Minimizes cost to consumer
- Competitive advantage over all other water purifiers

HONORS AND AWARDS



Unilever Engages Social
Entrepreneurs for Sustainable Living



MASSCHALLENGE

High Impact Startups join the
MassChallenge Program



Bay Area Companies
from 500 Startups



Best University Startup



The Most Creative
People in Business



Spring selection for the Plug
and Play Company



Pitch competition winner



25 Best Inventions



Favorite selection
from 500 Startups



Grant Awardee



Grant Awardee

MEDIA COVERAGE



Bug-killing book pages clean murky
drinking water



The Henry Ford's Innovation
Nation



Top Design Award



The Drinkable Book



'Drinkable book' filters filthy water
and makes it safer to drink,
researchers say



Foreign Policy Magazine's Global
Thinker award