Sawyer PointONE

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| Source Protection | Safe Transportation | Sedimentation | Filtration | Disinfection | Safe Storage |

# What is it?

Produced by Sawyer Products, the Sawyer PointONE™ is a gravity-driven membrane filter. It uses hollow fibre membranes with a pore size of 0.1 microns, making it effective for removing bacteria, protozoa, and helminths. With an adapter kit, the filter can be attached to a plastic bucket. Dirty water is poured into the plastic bucket, flows down through the filter (which traps particles and pathogens), and out into a safe storage container.

# https://sawyer.com/wp-content/uploads/2013/12/SP180-498x480.jpgPerformance

## Microbiological Effectiveness:

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| --- | --- |
| Parameter | Effectiveness |
| Bacteria | Very Effective (>99%) |
| Viruses | No independent tests |
| Cryptosporidium (Protozoa) | Very Effective (>99%) |
| Giardia (Protozoa) | Very Effective (>99%) |
| Helminths | Very Effective\* |

\*Assumption based on pathogen size

## Other Parameters

Effective for removing turbidity. Not effective for chemicals.

## Source Water Requirements

Can be used with turbid water, but the filter may clog more often and require more frequent backwashing. Turbid water (>50 NTU) should be settled or strained before filtering.

## Capacity

Can treat 32.8–46.5 L/hour. Typically treats 20 L (one bucket) at a time.

## Lifespan

Manufacturer states that the filter can be backwashed and reused indefinitely without needing replacement. Recent studies indicate lifespan may be shorter than this.

# Ease of Use & Acceptability

## Operation & Maintenance

Users pour water into the upper container, and wait for water to flow down the hose, through the filter into a lower safe storage container. A syringe (included) can be used to backwash the filter when flow rate slows down. The safe storage container must be cleaned regularly.

## Repair & Replacement

The filter should be replaced if it breaks, if flow rate suddenly increases, or if backwashing doesn’t return flow rate to normal.

## User Considerations & Preferences

Usually the user must connect the filter to a bucket. The flow rate may slow down quickly for turbid water.

# Feasibility

## Availability

Available online. Cannot be exported internationally through Sawyer Products Inc. They recommend contacting an international logistics company.

## Cost

US$60 from manufacturer.

## Size & Weight

Filter unit is 22 cm long by 7 cm wide, weighing 0.3 kg.

# More Information

Details and references: [www.hwts.info/products-technologies/cd408b5b/sawyerr-pointonetm-filter](https://www.hwts.info/products-technologies/cd408b5b/sawyerr-pointonetm-filter)