

- › [Membrane Solutions](#) /
- › [Membrane Solutions S1 Personal Water Filter Straw User Manual](#)

Membrane Solutions S1

Membrane Solutions S1 Personal Water Filter Straw User Manual

Model: S1 | Brand: Membrane Solutions

1. INTRODUCTION

The Membrane Solutions S1 Personal Water Filter Straw is a compact, lightweight, and highly effective water purification device designed for outdoor enthusiasts, emergency preparedness, and everyday use. It provides access to safe drinking water by removing harmful impurities from various fresh water sources.

This filter is certified by NSF & SGS to meet NSF/ANSI 42, 372, and 401 standards, ensuring the removal of odor, particles, microplastics, and lead-free material composition. Its 5-stage filtration system, including a coarse filter screen, double layer PP cotton fiber, coconut shell activated carbon, and hollow fiber ultrafiltration membranes, ensures comprehensive purification.



Image: Four Membrane Solutions S1 Personal Water Filter Straws.



Image: NSF/ANSI Certifications for the S1 Water Filter.

2. SETUP

2.1 Initial Priming

Before first use, or if the filter has dried out, it must be primed. Remove the silicone dust plug from the mouthpiece. Allow the filter to sit in safe, clean water for 20 seconds, keeping the mouthpiece out of the water. This process wets the internal ultrafiltration membrane, allowing for easier water flow.

2.2 Component Overview

The filter consists of a mouthpiece, filter housing, and a threaded water inlet cap. Both ends are removable

for cleaning and maintenance.

Image: Exploded view of the 5-stage filtration system.

3. OPERATING INSTRUCTIONS

3.1 Direct Drinking

Remove the protective caps from both ends of the filter. Place the threaded water inlet cap end directly into the water source (e.g., stream, lake). Open the mouthpiece cap and take several quick, strong sips to initiate water flow. Spit out the initial water sucked to clear any residual taste from the filter.

Image: Direct drinking from a natural water source.

3.2 Using with a Bottle or Pouch

The S1 filter straw is designed to fit standard 28mm or 30mm threaded water bottles. You can screw the filter onto the neck of a compatible bottle filled with untreated water. Alternatively, you can attach it to a soft water pouch (not included) to create a squeeze filter system or a gravity-fed system.

Image: Versatile filtering modes including gravity and squeeze systems.



Image: Gravity filtering system setup.

4. MAINTENANCE

4.1 Backflushing

After each use, or when flow rate decreases, backflush the filter to maintain performance. To backflush, draw clean water through the mouthpiece and then blow it back through the filter from the mouthpiece end. Repeat this process 3-5 times. This helps to clear the membrane surface of sediment and prevent clogging. A syringe is included for easier backflushing.

4.2 Storage

After backflushing, shake out any residual water and allow the filter to air dry. Store the filter in a cool, dry place with both caps tightly closed. Avoid prolonged exposure to direct sunlight and extreme high or freezing temperatures. Do not wash the device with soap, bleach, or other chemicals.

5. TROUBLESHOOTING

5.1 Unable to Draw Water

- Ensure the silicone dust plug has been removed from the mouthpiece.
- The filter may be clogged. Perform backflushing as described in Section 4.1.
- Air bubbles may be present in the membrane. Blow air through the mouthpiece to remove them.

5.2 Peculiar Smell or Taste

- Dirty impurities may be left on the filter element. Clean the filter thoroughly by backflushing after each use.
- If an unpleasant taste persists, it may indicate the filter needs replacement.

5.3 Decreased Flow Rate

- Perform backflushing to clear any blockages.
- If flow rate does not improve after backflushing, the filter may need to be replaced.

6. SPECIFICATIONS

Feature	Detail
Brand	Membrane Solutions
Model Name	S1
Filtration Stages	5-Stage (Coarse Filter Screen, Double Layer PP Cotton Fiber, Coconut Shell Activated Carbon, Hollow Fiber Ultrafiltration Membranes)
Pore Size	0.1 Microns
Filter Life	Up to 1,320 Gallons (5,000 Liters)
Maximum Flow Rate	500 Milliliters Per Minute (16.9 fl oz/min)
Item Weight	2 Ounces
Product Dimensions	7.1" long, 1" diameter
Materials	BPA-Free ABS, Food-Grade Plastics
Certifications	NSF/ANSI 42, 372, 401 & SGS Certified

7. WARRANTY AND SUPPORT

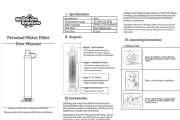
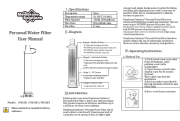


For any product-related inquiries, technical support, or warranty information, please contact Membrane Solutions customer service. Please retain this user manual for future reference.

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Related Documents - S1

	<p>Membrane Solutions Personal Water Filter User Manual</p> <p>User manual for the Membrane Solutions Personal Water Filter, detailing its specifications, diagram, introduction, operating instructions, cautions, and disclaimer. Learn how to use and maintain your portable water filter for safe drinking water.</p>
	<p>Membrane Solutions Personal Water Filter User Manual: Portable Water Purification for Outdoors</p> <p>Comprehensive user manual for the Membrane Solutions Personal Water Filter. Learn how to use, maintain, and store your portable water purifier for hiking, camping, travel, and emergency preparedness.</p>
	<p>Membrane Solutions Personal Water Filter User Manual - Safe Drinking Water Guide</p> <p>Comprehensive user manual for the Membrane Solutions Personal Water Filter (Models M01001, M01002, M01003). Learn how to use, maintain, and care for your portable water purifier to ensure safe drinking water from rivers, streams, and lakes, removing bacteria and protozoa.</p>
	<p>Membrane Solutions Personal Water Filter User Manual</p> <p>User manual for the Membrane Solutions Personal Water Filter, detailing specifications, operating instructions, maintenance, and safety precautions for models M01001, M01002, and M01003.</p>
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