

Nephros NanoGuard-S - Instructions for Use

INTRODUCTION

Information on this sheet must be read before the use of this filter to ensure safe and effective operation.

Recommended Storage: Between 5 and 35°C (41 and 95°F).

INDICATIONS

Description: The Nephros NanoGuard-S is a disposable in-line water ultra-filter for washing and drinking.

Single Use: The filter is intended for single use. Once installed the filter is intended to be used for approximately 1-3 months. After such time the unit should be replaced and discarded. Do not attempt to sanitize or re-sterilize it.

CONTRAINDICATIONS

Medical: The NanoGuard-S is not intended to be used in any medical applications. Do not use in hospitals or medical facilities.

WARNINGS & PRECAUTIONS

Pressure & Temperature: The NanoGuard-S is designed for a maximum incoming water pressure of 75 psi (5 bar) and a maximum temperature of 60°C (140°F).

Cyclic Use: The NanoGuard-S is designed for a maximum number of 5000 on/off cycles in in-line use and 500 cycles in open discharge use.

Replacement: The filter should be replaced when the flow rate begins to noticeably decrease. However, it is recommended that one establish a maintenance schedule of replacing the filter every 1-3 months dependent on water quality.

Water Monitoring: After installation of the NanoGuard-S, periodic monitoring of the water is recommended.

INSTALLATION & REMOVAL

Note: If it is the first time a NanoGuard-S is installed in a location, please refer to one of the *NanoGuard-S Installation Guides*. Prior to handling a new filter it is recommended that one wash their hands and wear disposable gloves.

- Open a new NanoGuard-S blister pack and remove the port caps.
- Mark the label with the installation date.
- If installing the threaded version of the filter, turn off the water supply valve to the filter. If installing the quick connect version of the filter, it is not necessary to turn off the water supply valve as the female quick connectors have internal shut off valves.
- Disconnect the inlet side of the used filter followed by the outlet side.
- Seal the used filter ports with the caps to minimize water leakage.
- Remove the used filter from its mounting clamp and discard appropriately.
- Place the new filter in the clamp making sure the flow direction arrows point towards the water outlet.
- Connect the outlet water line to the filter followed by the inlet line.

Note: Prolonged exposure of the filter to alkyl dimethyl benzyl ammonium chloride (ADBAC) may result in cracks to the external housing. It is recommended not to use ADBAC based cleaners.

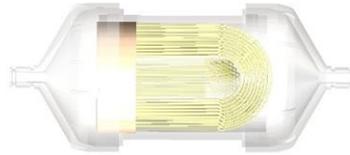
OPERATION

After a new NanoGuard-S is installed, water should be run through the filter for approximately 30 seconds to purge it of trapped air. The pressure drop across the NanoGuard-S generally reduces the flow rate by about ¼ to ½ of the rate without a filter. The filter should operate for 1-3 months of normal use with minimal degradation in flow. If the flow rate degrades significantly, the filter should be replaced.

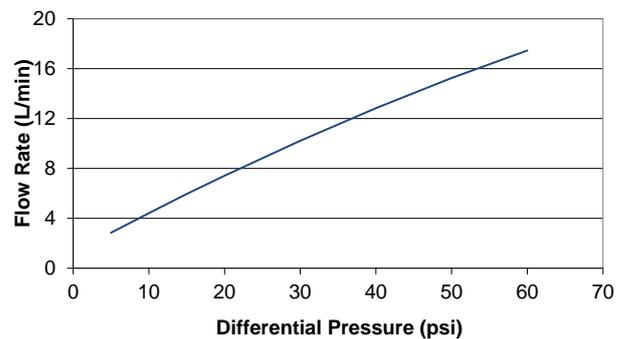
INTEGRITY TESTING

One can test the integrity of the filter using the following technique

- If using the threaded version of the filter turn off the water inlet valve.
- Disconnect the inlet port connection.
- Disconnect the outlet connection and connect a sterile 60 cc syringe to the outlet port using an adapter.
- With the inlet to drain, pump air into the filter using the 60 cc syringe until water stops flowing out the inlet port (2-3 syringe volumes).
- Attempt to push one final syringe volume of air into the filter. Hold the plunger down for 5 seconds then release it.
- If the plunger rises the filter integrity is assured. If it fails to rise it is recommended to replace the filter.



NanoGuard-S - Clean Water Flow



Specifications	Nephros NanoGuard-S
Max Inlet Pressure	75 psi (5 bar)
Max Inlet Temperature	60°C (140°F)
<u>Max number of on/off cycles</u>	
In-Line Use	5000
Open Discharge	500
<u>Filter Membrane</u>	Medisulfone [®]
Material	Polysulfone
MW cut-off	15 kDa
Pore Size	5 nm
	Meets ASTM F838-05*
Expected Life	1-3 months

Medisulfone[®] is a registered trademark of Medica S.p.A.

* MicroTest Lab Report 05-016

Assembled at:

Medica S.p.A.
Medolla, Italy

Manufacturer:

Nephros Inc.
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River Edge, NJ 07661 USA