

NanoFilter

A Major Development In Water Filters

The NANO Filter consists of a nano fine carbon impregnated glass fibre material which is tightly folded to create a very large surface area. The NANO Filter candle fits into our standard Filter Housing. The large surface area ensures an excellent flow rate and resistance to blocking (for peaty water for instance.) It's fine weave and material properties are responsible for its outstanding Viral and Pharma ratings.



What Does The NanoFilter Do?

- The NanoFilter Candle fits into our re usable Filter Housing (re usable to reduce plastic waste).
- The NanoFilter Candle consists of a nano fine carbon impregnated glass fibre material which is tightly folded to create a large surface area. This ensures a high flow rate, even at very low water pressure, and reduces the risk of blocking if the mains water is peaty or dirty.
- The composition of the NanoFilter Candle removes 99.98% of Cryptosporidium, Giardia Intestinalis and E Coli and provides protection against Legionella, Pseudomonas, Salmonella, Mycobacteria and Aspergillus.
- The NanoFilter Candle can be disposed with household waste.

Table 1 - Bacteria and virus removal efficiencies for the NanoCeram Cartridges

Organism		Size, μm	cartridge	Removal efficiency, %	Comment
virus	Poliovirus 1	0.025-0.030	VS2.5x5	>99.92 \pm 0.01%	Ref. (1) ^a
	Echovirus 1	0.050-0.080	VS2.5x5	>99.98 \pm 0.00%	Ref. (1) ^a
	Coxsackievirus B5	0.027	VS2.5x5	>99.991 \pm 0.01%	Ref. (1) ^a
bacteriophage	Adenovirus	0.070-0.090	VS2.5x5	>99.997 \pm 0.00%	Ref. (1) ^a
	MS2	0.027	VS2.5x5	99.9%	Ref. (2) ^b
			P2.5x10	99.92%	Ref. (3) ^c
			PAC2.5x10	99.96%	Ref. (3) ^c
bacteria	Pseudomonas Aeruginosa	(0.5-1) ^{d, e} (2-5) ^{d, f}	VS2.5x5	99.994 \pm 0.004%	Ref. (2) ^b
			PAC2.5x5	>99.999%	Ref. (3) ^c
			PAC2.5xSAG	99.999 \pm 0.002%	Ref. (2) ^b
	E. coli	0.5 ^{e, f}	PAC2.5x5	99.99992%	Ref. (3) ^c
	Raoultella terrigena	(0.3-1) ^e (0.6-6) ^f	P2.5x10	>99.99992%	Ref. (3) ^c

Notes: a) Ref. (1). L. A. Ikner, M. Soto-Beltran, and K. R. Bright, Appl. Environ. Microbiol., March 25, 2011; b) Ref. (2). Argonide datasheet. Prior to each sampling point the cartridge was conditioned with 10 void volumes (~5 L for P2.5x5 and PAC2.5xSAG) and 200 mL sample was collected at 0.5 GPM. Test was done according to NSF/ANSI P231 standard, specifically for sample point #1; c) Ref. (3). F. Tepper, L. Kaledin, O. Vargas, and T. Kaledin, IWC-10-47, October 24-28, 2010, San Antonio, TX; d) Ref. (4). J. L. Melnick, M. Rhan, J. Warren and S. S. Breese Jr. J. Immunology, 1951 vol. 67 pp. 151-162 e) diameter; f) length.

Logical removal efficiencies for the NanoCeram Cartridges

Organism	Size, μm	Cartridge	Removal Efficiency, %	Comment
Poliovirus 1	0.025-0.030	VS2.5x5	>99.92 \pm 0.01%	Ref. (1) ^a
Echovirus 1	0.050-0.080	VS2.5x5	>99.98 \pm 0.00%	Ref. (1) ^a
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		PAC2.5xSAG	99.999 \pm 0.002%	Ref. (2) ^b
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Raoultella terrigena	(0.3-1) ^e (0.6-6) ^f	P2.5x10	>99.99992%	Ref. (3) ^c

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