



**Issue 3** The information hub is designed to provide - mainly technical - information relating to Water Coolers and Boilers, to assist you with your work

## Nano Filter Technology

A Major Development In Water Filters

The NanoCeram material used for the NANOFilter is NSF/ANSI 53 certified. It removes 99.98% of Cysts, Cryptosporidium, E Coli, Giardia and provides some protection against Legionella, Pseudomonas, Salmonella, Mycobacteria and Aspergillus.



Microbiological removal efficiencies for the NanoCeram Cartridges

Type	Organism	Size, µm	Cartridge	Removal Efficiency, %	Comment	
Virus	Poliovirus 1	0.025-0.030	VS2.5-5	>99.92±0.01%	Ref. (1) <sup>a</sup>	
	Echovirus 1	0.050-0.080	VS2.5-5	>99.98±0.00%	Ref. (1) <sup>a</sup>	
	Coxsackievirus B5	0.027	VS2.5-5	>99.991±0.01%	Ref. (1) <sup>a</sup>	
	Adenovirus	0.070-0.090	VS2.5-5	>99.997±0.00%	Ref. (1) <sup>a</sup>	
Bacteriophage	MS2	0.027	VS2.5-5	99.9%	Ref. (2) <sup>b</sup>	
			P2.5-10	99.92%	Ref. (3) <sup>c</sup>	
			PAC2.5-10	99.96%	Ref. (3) <sup>c</sup>	
			P2.5-10	99.994±0.004%	Ref. (2) <sup>b</sup>	
			PAC2.5-5	>99.999%	Ref. (3) <sup>c</sup>	
			VS2.5-5	>98%	Ref. (4) <sup>d</sup>	
Bacteria	Male specific coliphages	(0.5-1) <sup>e,f</sup> (2-5) <sup>e,g</sup>	VS2.5-5	99.995±0.027%	Ref. (2) <sup>b</sup>	
			PAC2.5-5AG	99.999±0.002%	Ref. (2) <sup>b</sup>	
	E. coli		0.5 <sup>f</sup> 2 <sup>g</sup>	PAC2.5-5	99.99992%	Ref. (3) <sup>c</sup>
	Raoultella terrigena		(0.3-1) <sup>f</sup> (0.6-6) <sup>g</sup>	P2.5-10	>99.99992%	Ref. (3) <sup>c</sup>

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 PAC2.5x5AG) 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). C. D. Gibbons, R. A. Rodrigues, L. Tallon, and M. D. Sobsey. J. Appl. Microbiology, 2010; e) Ref. (5). J. L. Melnick, M. Rhian, J. Warren and S. S. Breese Jr. J. Immunology, 1951 vol. 67 pp. 151-162 diameter; f) length; g) Ref. (5). J. L. Melnick, M. Rhian, J. Warren and S. S. Breese Jr. J. Immunology, 1951 vol. 67 pp. 151-162

**DISCLAIMER:** The information supplied is for guidance only and should not be construed as a warranty. All implied warranties are expressly disclaimed, including without limitation any warranty of merchantability of fitness for use. All users of the material are responsible for ensuring that it is suitable for their needs, environment and end use. All data is subject to change. Our filters are suitable for use with potable water only.



## NANOFilter Green Credentials

The NANOFilter plastic housing is re-usable and the NANOFilter Candle can be disposed with household waste, making it the a truly GREEN filter system.

## NANOFilter's Offer Better Filtration, An Exceptional Flow Rate & Resistance To Blocking

The composition of the NANOFilter candle ensures better filter performance compared to conventional carbon block filter. In addition to its high pharma rating it offers superior filtration, guarantees an exceptional flow rate to counter low water pressure and a reduced risk of blocking due to peaty water.

Watch the Video Now!

Visit: <http://www.aafirst.co.uk/nano-filter-technology>

