

# NSF Performance Data

The Aqualuxe is proven performance, third-party tested and verified: NSF-certified to treat contaminants of Aesthetic Concern (Standard 42). NSF-certified to treat contaminants of Health Concern (Standard 53). NSF-certified to treat Emerging Contaminants (Standard 401). NSF-certified as a microbiological purifier (NSF P231). The Aqualuxe is powerful enough to treat the contaminants of today, tomorrow, and beyond. The Aqualuxe is filtration evolved.

## NSF/ANSI 42 - Aesthetic Effects

Contaminant	% of reduction	Influent Concentration	Max Allowable
CHLORAMINE	>97.5%	3.0 mg/L +/- 10%	0.5 mg/L
CHLORINE	>97.5%	2.0 ± 10%	≥ 50%
Particulate Class I	99.8%	min. 10,000 particles/mL	≥ 85%*

## NSF/ANSI 53 - Health Effects

Contaminant	% of reduction	Influent Concentration	Max Allowable
ALACHLOR	>98%	0.050	0.001
<b>ARSENIC (pH 6.5)</b>	<b>&gt;97.9%</b>	<b>0.050 ± 10%</b>	<b>0.010 mg/L</b>
<b>ARSENIC (pH 8.5)</b>	<b>97.6%</b>	<b>0.050 ± 10%</b>	<b>0.010 mg/L</b>
<b>ASBESTOS</b>	<b>&gt;99%</b>	<b>10<sup>7</sup> to 10<sup>8</sup> fibers/L</b>	<b>99%*</b>
ATRAZINE**	>97%	0.100	0.003
BENZENE**	>99%	0.081	0.001
BROMODICHLOROMETHANE (TTHM)**	>99.8%	0.300	0.015
BROMOFORM (TTHM)**	>99.8%	0.300	0.015
CARBOFURAN (Furadan)**	>99%	0.19	0.001
CARBON TETRACHLORIDE**	98%	0.078	0.0018
<b>CHLORDANE</b>	<b>&gt;99.5%</b>	<b>0.040 ± 10%</b>	<b>0.002mg/L</b>
CHLORO BENZENE (Monochlorobenzene)**	>99%	0.077	0.001
CHLOROPICRIN**	99%	0.015	0.0002
CHLOROFORM (TTHM)* (surrogate chemical)	>99.8%	0.300	0.015
Cryptosporidium (CYST)	99.95%	minimum 50,000/L	99.95% reduction requirement
<b>CYST</b>	<b>99.99%</b>	<b>min. 50,000/L</b>	<b>99.95%*</b>
2, 4-D*	98%	0.110	0.0017
DBCP (see Dibromochloropropane)**	>99%	0.052	0.00002
1,2-DCA (see 1,2-DICHLOROETHANE)**	95%	0.088	0.0048
1,1-DCE (see 1,1-DICHLOROETHYLENE)**	>99%	0.083	0.001
DIBROMOCHLOROMETHANE**	>99.8%	0.300	0.015
DIBROMOCHLOROPROPANE (DBCP)**	>99%	0.052	0.00002
o-DICHLORO BENZENE (1,2 Dichlorobenzene)**	>99%	0.080	0.001
p-DICHLORO BENZENE (para-Dichlorobenzene)**	>98%	0.040	0.001
1,2-DICHLOROETHANE (1,2-DCA)**	95%	0.088	0.0048
1,1-DICHLOROETHYLENE (1,1-DCE)**	>99%	0.083	0.001

Contaminant	% of reduction	Influent Concentration	Max Allowable
CIS-1,2-DICHLOROETHYLENE**	>99%	0.170	0.0005
TRANS-1,2- DICHLOROETHYLENE**	>99%	0.086	0.001
1,2-DICHLOROPROPANE**	>99%	0.080	0.001
CIS-1,3- DICHLOROPROPYLENE**	>99%	0.079	0.001
DINOSEB*	99%	0.170	0.0002
EDB (see ETHYLENE DIBROMIDE)**	>99%	0.044	0.00002
ENDRIN**	99%	0.053	0.00059
Entamoeba (see CYSTS)	99.95%	minimum 50,000/L	99.95% reduction requirement
ETHYLBENZENE**	>99%	0.088	0.001
ETHYLENE DIBROMIDE (EDB)**	>99%	0.044	0.00002
Furadan (see CARBOFURAN)**	>99%	0.19	0.001
Giardia Lamblia (see CYST)	>99.95%	minimum 50,000/L	99.95% reduction requirement
HALOACETONITRILES (HAN)**			
BROMOCHLOROACETONITRILE	98%	0.022	0.0005
DIBROMOACETONITRILE	98%	0.024	0.0006
DICHLOROACETONITRILE	98%	0.0096	0.0002
TRICHLOROACETONITRILE	98%	0.015	0.0003
HALOKETONES (HK):**			
1,1-DICHLORO-2-PROPANONE	99%	0.0072	0.0001
1,1,1-TRICHLORO-2-PROPANONE	96%	0.0082	0.0003
HEPTACHLOR**	>99%	0.25	0.00001
HEPTACHLOR EPOXIDE**	98%	0.0107	0.0002
HEXACHLOROBUTADIENE**	>98%	0.044	0.001
HEXACHLOROCYCLOPENTADIENE**	>99%	0.060	0.000002
<b>LEAD (pH 6.5)</b>	<b>&gt;99.3%</b>	<b>0.15 ± 10%</b>	<b>0.010 mg/L</b>
<b>LEAD (pH 8.5)</b>	<b>&gt;99.3%</b>	<b>0.15 ± 10%</b>	<b>0.010 mg/L</b>
LINDANE*	>99%	0.055	0.00001
<b>MERCURY (pH 6.5)</b>	<b>&gt;96.6%</b>	<b>0.006 ± 10%</b>	<b>0.002 mg/L</b>
<b>MERCURY (pH 8.5)</b>	<b>&gt;96.7%</b>	<b>0.006 ± 10%</b>	<b>0.002 mg/L</b>
METHOXYCHLOR*	>99%	0.050	0.0001
Methylbenzene (see TOLUENE)**	>99%	0.078	0.001
Monochlorobenzene (see CHLOROENZENE)**	>99%	0.077	0.001
<b>MTBE (methyl tert-butyl ether)</b>	<b>97%</b>	<b>0.015 ± 20%</b>	<b>0.005 mg/L</b>
POLYCHLORINATED BIPHENYLS (PCBs , Aroclor 1260)	>99.9%	0.01 +/- 10%	0.0005
<b>PCB</b>	<b>&gt;97%</b>	<b>0.01 ± 10%</b>	<b>0.0005 mg/L</b>
PCE (see TETRACHLOROETHYLENE)**	>99%	0.081	0.001
PENTACHLOROPHENOL**	>99%	0.096	0.001
Perchlorobutadiene (see HEXACHLOROBUTADIENE)*	>98%	0.044	0.001
Propylene Dichloride (see 1,2 -DICHLOROPROPANE)*	>99%	0.080	0.001
<b>RADON</b>		<b>4000 ± 1000 pCi/L</b>	<b>300 pCi/L</b>
SIMAZINE*	>97%	0.120	0.004
Silvex (see 2,4,5-TP)**	99%	0.270	0.0016
STYRENE (Vinylbenzene)**	>99%	0.150	0.0005
1,1,1-TCA (see 1,1,1 - TRICHLOROETHANE)**	95%	0.084	0.0046
TCE (see TRICHLOROETHYLENE)**	>99%	0.180	0.0010
1,1,2,2- TETRACHLOROETHANE**	>99%	0.081	0.001
TETRACHLOROETHYLENE**	>99%	0.081	0.001
TOLUENE (Methylbenzene)**	>99%	0.078	0.001
<b>TOXAPHENE</b>	<b>&gt;95%</b>	<b>0.015 ± 10%</b>	<b>0.003 mg/L</b>

Contaminant	% of reduction	Influent Concentration	Max Allowable
Toxoplasma (see CYSTS)	99.95%	minimum 50,000/L	99.95% reduction requirement
2,4,5-TP (Silvex)**	99%	0.270	0.0016
TRIBROMOACETIC ACID**		0.042	0.001
1,2,4 TRICHLOROENZENE (Unsymtrichlorobenzene)*	>99%	0.160	0.0005
1,1,1-TRICHLOROETHANE (1,1,1-TCA)**	95%	0.084	0.0046
1,1,2-TRICHLOROETHANE*	>99%	0.150	0.0005
TRICHLOROETHYLENE (TCE)*	>99%	0.180	0.0010
TRICHALOMETHANES (THM) (Chloroform; Bromoform; Bromodichloromethane; Dibromochloromethane)	>99.8%	0.300	0.015
<b>TURBIDITY</b>	<b>99.0%</b>	<b>11 ± 1 NTU</b>	<b>0.5 NTU</b>
Unsym-Trichlorobenzene**	>99%	0.160	0.0005
Vinylbenzene (see STYRENE)**	>99%	0.150	0.0005
XYLENES (TOTAL)**	>99%	0.070	0.001

## NSF/ANSI 401 - Emerging Contaminants

Contaminant	% of reduction	Influent Concentration	Max Allowable
<b>Group I</b>			
Atenolol	>96.4%	200 ± 20%	0.00003 mg/L
Carbamazepine	>98.5%	1400 ± 20%	0.0002 mg/L
DEET	>98.6%	1401 ± 20%	0.0002 mg/L
Linuron	>96.5%	140 ± 20%	0.00002 mg/L
Meprobamate	>95.3%	400 ± 20%	0.00006 mg/L
Metolachlor	>98.7%	1400 ± 20%	0.0002 mg/L
Trimethoprim	>96.8%	140 ± 20%	0.00002 mg/L
<b>Group II</b>			
TCEP (Group 2)	>98.0%	5000 ± 20%	0.0007 mg/L
TCPP (Group 2)	>97.9%	5000 ± 20%	0.0007 mg/L
<b>Group III</b>			
Bisphenol A (Group 3)	>99.0%	2000 ± 20%	0.0003 mg/L
Estrone (Group 3)	>96.6%	140 ± 20%	0.00002 mg/L
Ibuprofen (Group3)	>95.1%	400 ± 20%	0.00006 mg/L
Naproxen (Group 3)	>96.4%	140 ± 20%	0.00002 mg/L
Nonyl phenol (Group 3)	>95.6%	1400 ± 20%	0.0002 mg/L
Phenytoin (Group 3)	>95.4%	200 ± 20%	0.00003 mg/L

## NSF/ANSI Protocol P231 - Viruses & Bacteria

Contaminant	% of reduction	Influent Concentration	Max Allowable
Bacteria, R. Terrigena (ATCC-33257)	≥ 99.9999%	2.8 x 10 <sup>7</sup> /100 mL	
Virus, MS2 (ATCC-15597-B1)	≥ 99.99%	4.3 x 10 <sup>4</sup> /mL	

## Footnotes

\*Reduction required. \*\*Chloroform was used as a surrogate for claims of reduction of Volatile Organic Chemicals (VOC). Multipure Systems tested at >99.8% actual reduction of Chloroform. Percent reduction shown herein reflects the allowable claims for VOCs as per tables in the Standard. Incidental contaminants are those compounds that have been detected in drinking water suppliers at trace levels. While occurring at only trace levels these compounds can affect the public acceptance/perception of drinking water quality.

1. **Do not use with water that is microbiologically unsafe or with water of unknown quality without adequate disinfection before or after the unit. Systems certified for cyst reduction may be used on disinfected waters that may contain filterable cysts.**
2. Multipure Drinking Water Systems have been certified, as indicated, by NSF International for compliance to NSF/ANSI Standard Nos. 42, 53, 58, 401 and Protocol P231. Multipure Drinking Water Systems have been certified by the State of California Department of Public Health for the reduction of specific contaminants.
3. Filter life will vary in proportion to the amount of water used and the level of impurities in the water being processed. For optimum performance, it is essential that the filter be replaced on a regularly scheduled basis as follows: (a) annually; (b) when the unit's rated capacity has been reached; (c) the flow rate diminishes; or (d) the filter becomes saturated with bad tastes and odors.
4. Do not allow water to freeze in the unit. If unit is exposed to freezing temperatures, drain water from unit and remove filter.
5. Do not allow water to sit in unit for extended periods of time (10 or more days) without being used. If unit is to be left unused for more than 10 days, drain all water from the system and remove the filters. Upon your return, reconnect the filters in the housing and continue use. In the event water does sit in the unit for 10 or more days, the system should be flushed by allowing water to flow to waste for about 10 minutes; then continue use as normal.
6. Multipure Drinking Water System housings are warranted for a Lifetime (provided that the filter be replaced at least once a year). All exterior hoses and attachments to the System are warranted for defects in material and workmanship for one year. Please see the Owner's Manual for complete product guarantee and warranty information.
7. Please see the Owner's Manual for installation instructions and operating procedures.
8. In compliance with New York law, it is recommended that before purchasing a water treatment system, NY residents have their water supply tested to determine their actual water treatment needs. Please compare the capabilities of the Multipure unit with your actual water treatment needs.
9. While testing was performed under standard laboratory conditions, actual performance may vary.
10. The list of substances which the treatment device reduces does not necessarily mean that these substances are present in your tap water.
11. Multipure's Aqualuxe have been tested for the treatment of water containing pentavalent arsenic (also known as As(V), As(+5), or arsenate) at concentrations of 0.30 mg/L or less. This system reduces pentavalent arsenic, but may not reduce other forms of arsenic. This system is to be used on water supplies containing a detectable free chlorine residual at the system inlet or on water supplies that have been demonstrated to contain only pentavalent arsenic. Treatment with chloramine (combined chlorine) is not sufficient to ensure complete conversion of trivalent arsenic to pentavalent arsenic.

